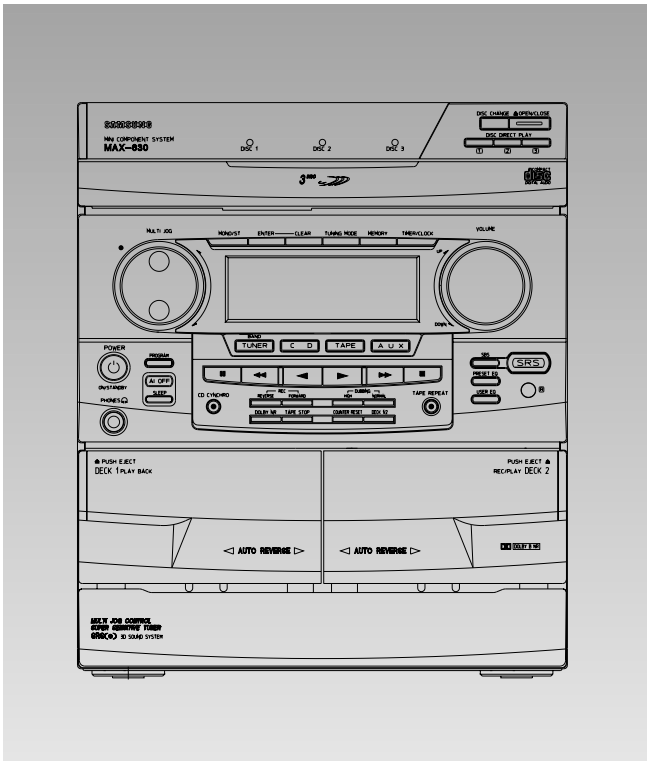
SAMSUNG

3 CD CHANGER MINI COMPONENT SYSTEM

MAX-630

SERVICE Manual

3 CD CHANGER MINI COMPONENT



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Code No. AH68-20106A

1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children--might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

4. Design Alteration Warning:
   Never alter or add to the mechanical or electrical design of the unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

5. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

   With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, etc.) and all exposed metal parts. Examples: Handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat.

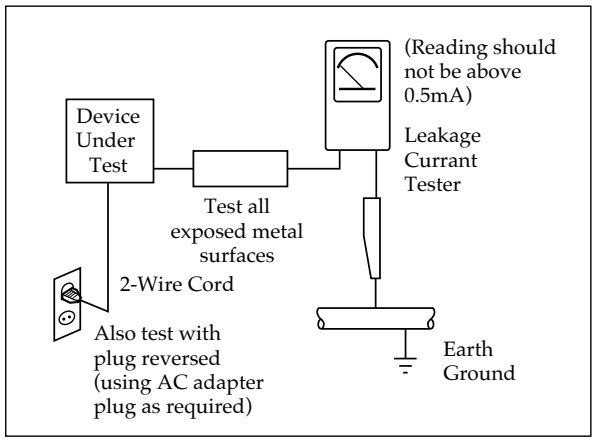

(Reading should not be above 0.5mA)
Device Under Test
Leakage Currant Tester
Test all exposed metal surfaces
2-Wire Cord
Also test with plug reversed (using AC adapter plug as required)
Earth Ground

Fig. 1-1 AC Leakage Test

6. Insulation Resistance Cold Check:
   (1) With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. (2) Set the power switch to ON. (3) Measure the resistance between the shorted AC plug and any exposed metallic parts. Example: Screwheads, antenna, control shafts or handle brackets.

   If any of the exposed metallic parts has a return path to the chassis, the measured resistance should be between 1 and 5.2 megohms. If there is no return path, the measured resistance should be "infinite." If the resistance is outside these limits, a shock hazard might exist. See Figure 1-2

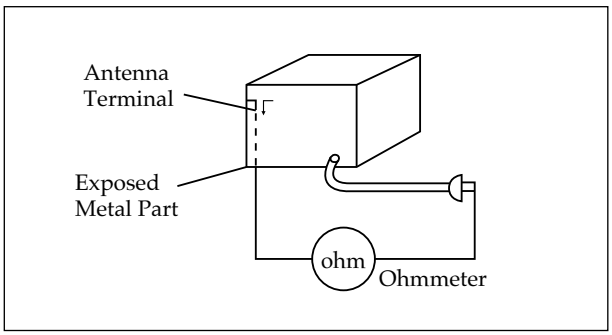


Fig. 1-2 Insulation Resistance Test

1-1 Safety Precautions (Continued)

7. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards

8. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that no wires or components touch thermally hot parts.

9. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

10 Components that are critical for safety are indicated in the circuit diagram by shading, ⚠ or ⚠ . Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

1-2 Servicing Precautions

Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

1. Servicing precautions are printed on the cabinet. Follow them.

2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring may be clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.

4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.

5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.

6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static" (these can accumulate sufficient electrical charge to damage ESDs).

7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

9. Minimize body motions when handing unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

1-4 Special Precautions and Warning Labels for Laser Products

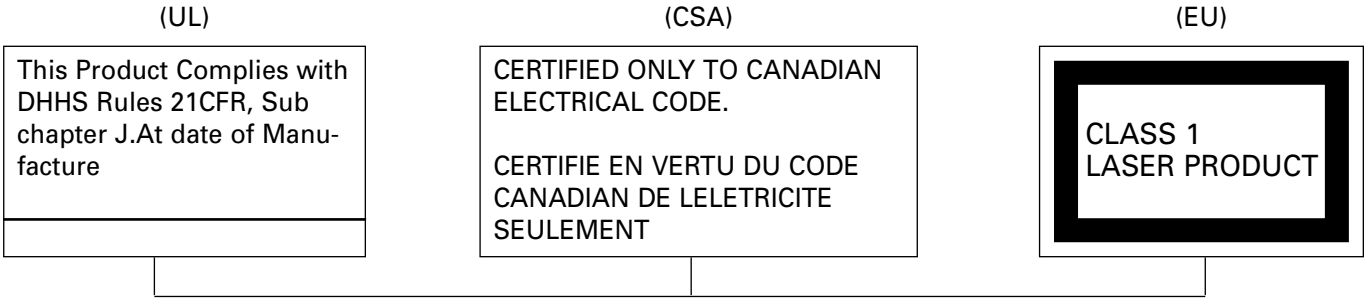

(UL)
This Product Complies with DHHS Rules 21CFR, Sub chapter J.At date of Manu-facture
(CSA)
CERTIFIED ONLY TO CANADIAN ELECTRICAL CODE.
CERTIFIE EN VERTU DU CODE CANADIAN DE LELETRICITE SEULEMENT
(EU)
CLASS 1
LASER PRODUCT

Fig. 1-3 Warning Labels (Location: Enclosure Block)

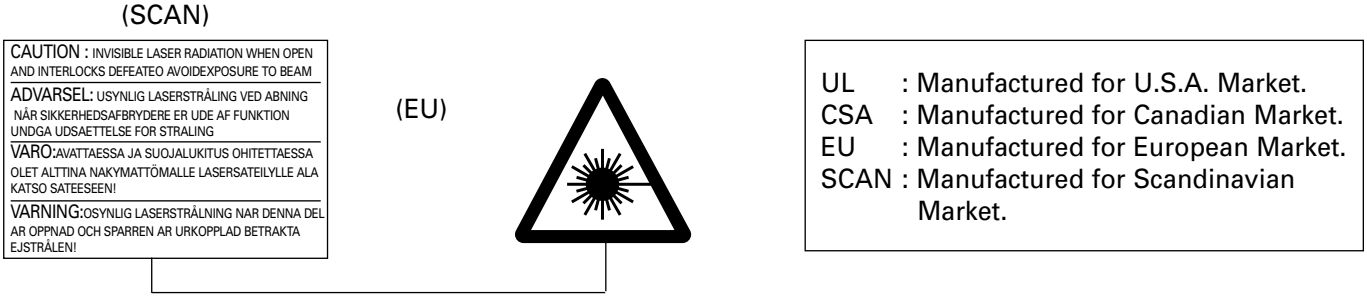

(SCAN)
CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATEO AVOIDEXPOSURE TO BEAM
ADVARSEL: USYNLIG LASERSTRÅLING VED ABNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGA UDSAETTELSE FOR STRALING
VARO:AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTINA NAKYMATTÖMALLE LASERSATEILYLLE ALA KATSO SATEESEEN!
VARNING:OSYNLIG LASERSTRÅLNING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URKOPPLAD BETRAKTA EJSTRÅLEN!
(EU)
UL : Manufactured for U.S.A. Market.
CSA : Manufactured for Canadian Market.
EU : Manufactured for European Market.
SCAN : Manufactured for Scandinavian Market.

Fig. 1-4 Warning Labels (Location: Disc Clamper, Inner Side of Unit Door or Nearby Unit Chassis)

1-4 Special Precautions and Warning Labels for Laser Products (Continued)

1-4-1 Warnings

1. When servicing, do not approach the LASER exit with the eye too closely. In case it is necessary to confirm LASER beam emission, be sure to observe from a distance of more than 30 cm from the surface of the objective lens on the optical pick-up block.

2. Do not attempt to handle the objective lens when the DISC is not on the tray.

1-4-2 Laser Diode Specifications

Material: GaAs+ GaAlAs
Wavelength: 760-800 nm
Emission Duration: Continuous

Laser Output: 0.2 mw (measured at a 1.6 mm distance from the objective lens surface on the optical pick-up block.)

1-4-3 Handling the Optical Pick-up

1. Static electricity from clothing or the body may cause electrostatic breakdown of the laser diode in the Optical Pickup. Follow this procedure:

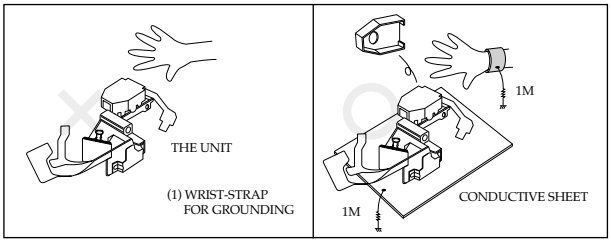
2. Place a conductive sheet on the work bench (i.e., the black sheet used for wrapping repair parts.) Note: The surface of the work bench should be covered by a copper ground plane, which is grounded.

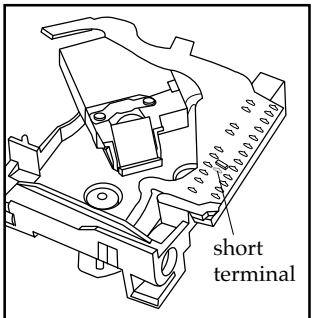
3. The repair technician must wear a wrist strap which is grounded to the copper sheet.

4. To remove the Optical Pickup block: Place the set on the conductive sheet, and momentarily touch the conductive sheet with both hands. (While working, do not allow any electrostatic sources--such as clothes--to touch the unit.)

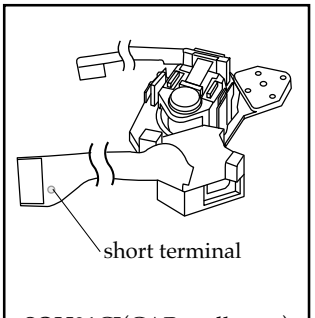
5. Ground the "Short Terminal" (located on the PCB, inside the Pickup Assembly) before replacing the Pickup. This terminal should be shorted whenever the Pickup Assembly is lifted or moved.

6. After replacing the Pickup, reopen the Short Terminal. See diagrams below:

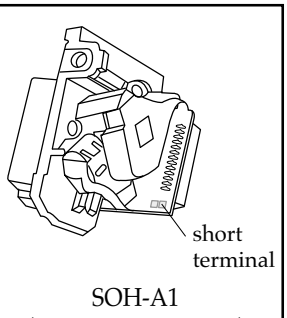




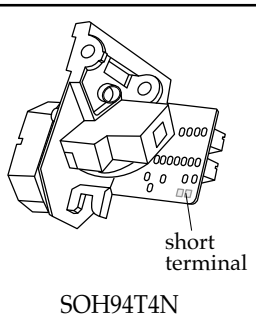
SOH91VI(LDP)



SOH91CI(CAR,walkman)



SOH-A1
(CMS-V10,CMS-V30)



SOH94T4N
(CMS-V10,CMS-V30)

2. Product Specifications

General		Power source Power consumption Dimensions (mm)	230V 247W 270(W)x317(H)x333(D)
Amplifier		Power output Total harmonic distortion Frequency range Signal to noise ratio Channel separation Input sensitivity	65W/CH(6Ω) 10% 30Hz ~ 25kHz 75 dB 50 dB 400mV
Tuner	FM	Frequency range Usable sensitivity Signal to noise ratio Middle frequency Total harmonic distoration Separation (Stereo)	87.5 ~ 108MHz 1μV 62dB 60dB 0.45% 35dB
	MW	Frequency range Usable sensivity Signal to noise ratio Middle frequency Total harmonic distortion	522 ~ 1611KHz 600μV 40dB 30dB 2%
	LW	Frequency range Usable sensivity Signal to noise ratio	146 ~ 290KHz 1000μV 35dB
Cassette		Frequecny range WOW FLUTTER Erasing effect Signal to noise ratio Total harmonic distortion	125Hz ~ 12.5KHz 0.15% 60dB 40dB 2.5%
Compact Disc		Frequency response Signal to noise ratio Channel separation Total harmonic distortion	20Hz ~ 20KHz(¡ 1dB) 90dB(1kHz 0dB) 80dB(1kHz 0dB) 0.05%(1kHz 0dB)

* Specifications are subject to change without notice.

3. Disassembly and Reassembly

3-1 Cabinet-Top

1. Remove 11 screws holding the cabinet-top.
2. Lift the back of the cabinet-top and slide it to the rear to remove. (See arrow)

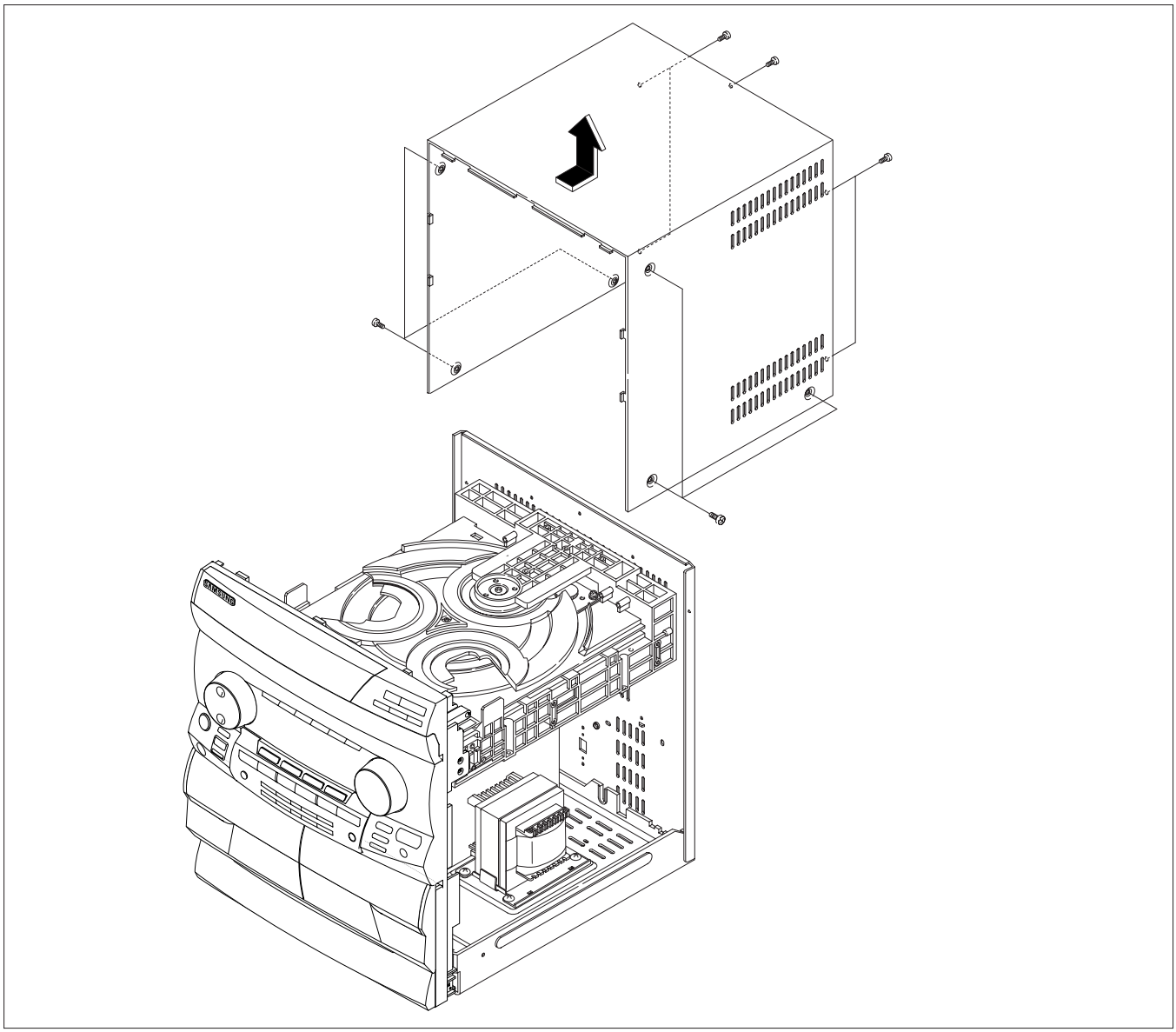


Fig. 3-1

3-2 CD-Mecha, DOOR-CD

1. If power is connected :
   - Turn power on
   - Open the tray using the open/close key
   - Remove the Door in the direction of arrow ③.

2. If Power is not connected :
   - Turn the gear clockwise using a screw driver as shown in Fig. 3-1- 1.
   - Pull the Tray in the direction of arrow ② and then remove the Door in the direction of arrow ③ .

3. Remove 2 screws ④ and lift the CD-Mecha.

Fig. 3-2-1

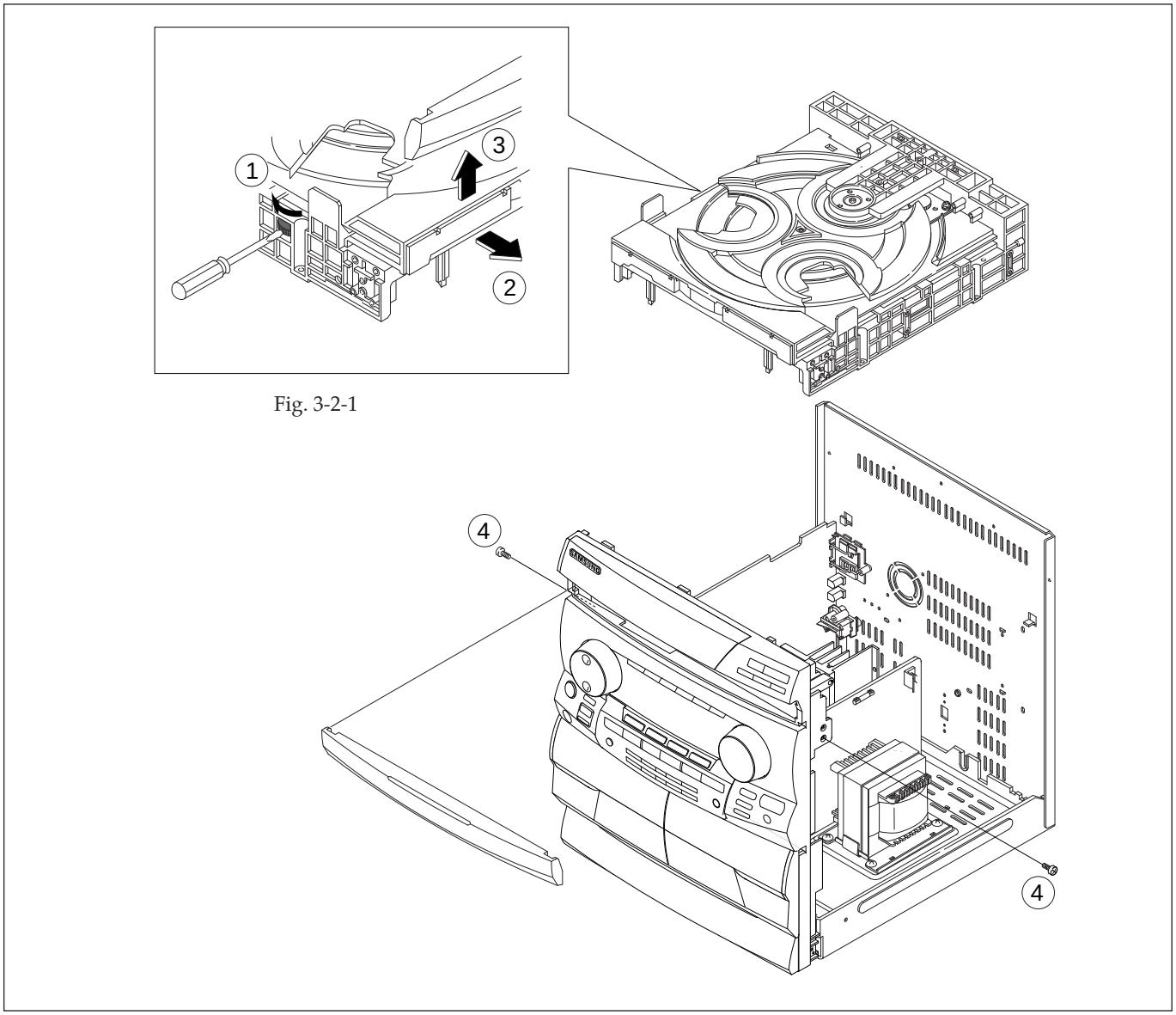


Fig. 3-2

3-3 Cabinet-Rear and Main PCB

1. Remove 11 screws ⑤ and then lift the cabinet-rear ⑥ and slide it to rear to remove (see arrow).
2. Remove the Main-PCB ⑦ to rear.

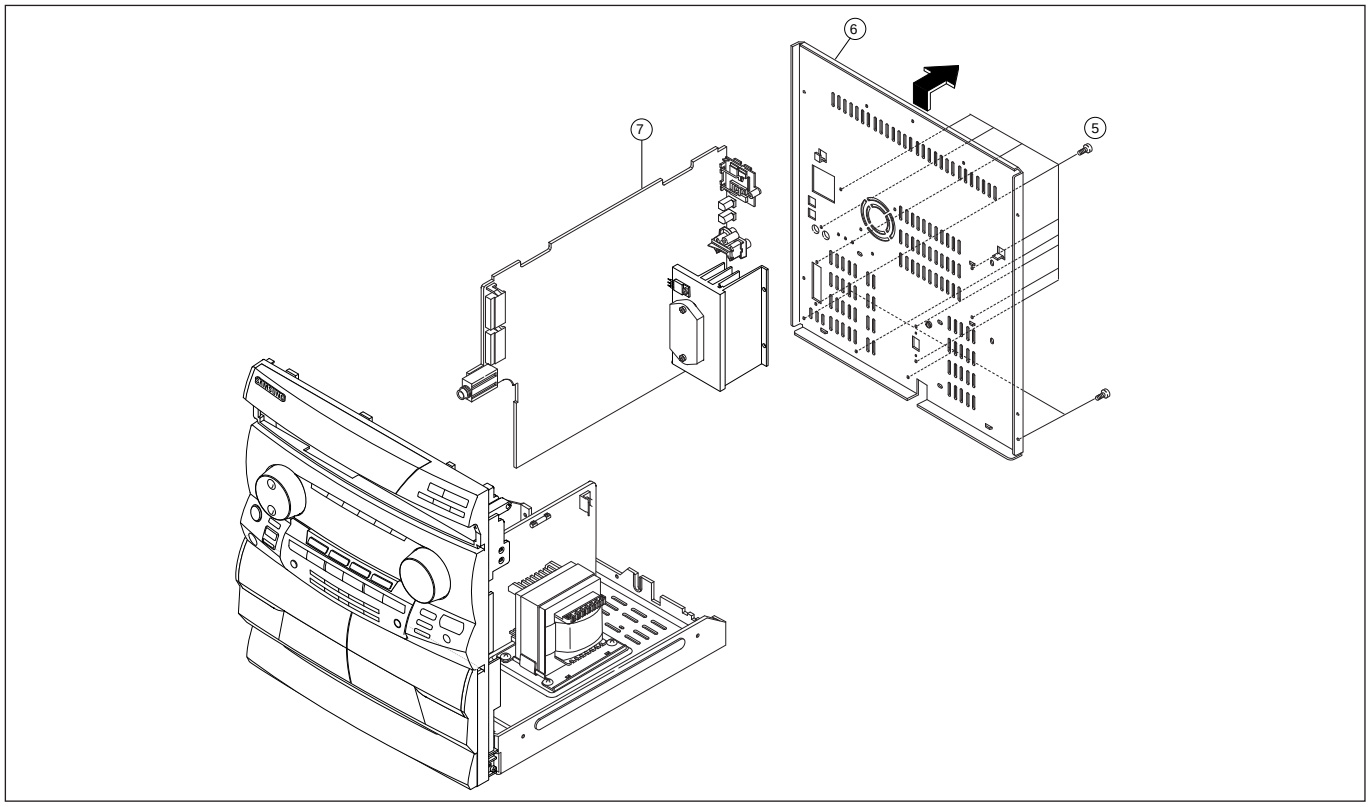


Fig. 3-3

3-4 Cabinet-Front and Cabinet-Bottom

1. Remove 5 screws ⑧.
2. Remove the cabinet-rear by pushing the "A" and "B" as shown.

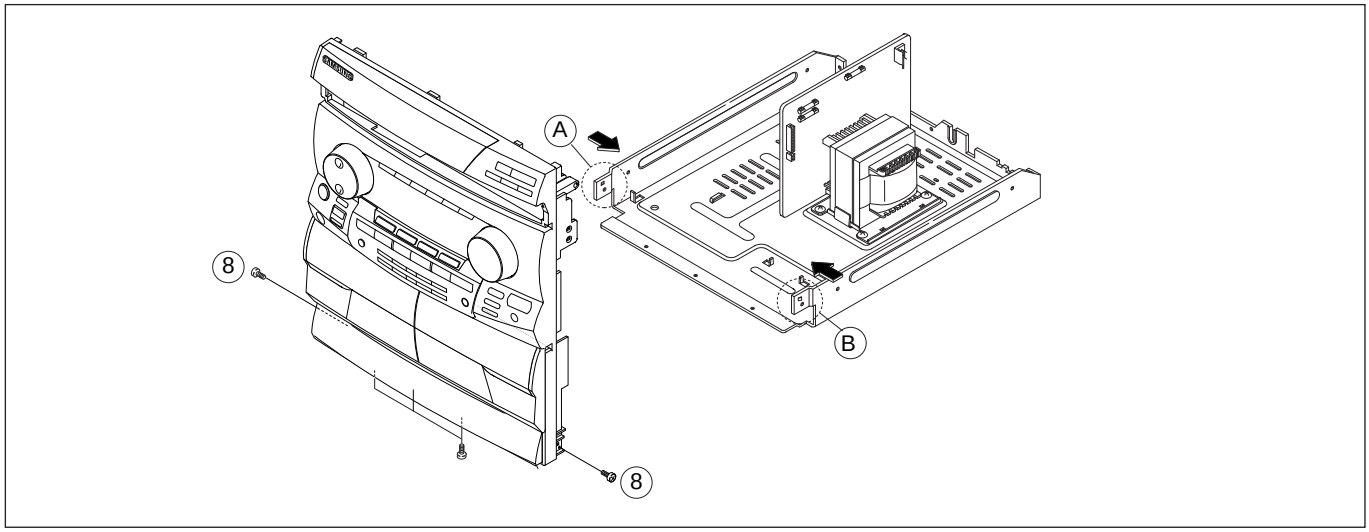


Fig. 3-4

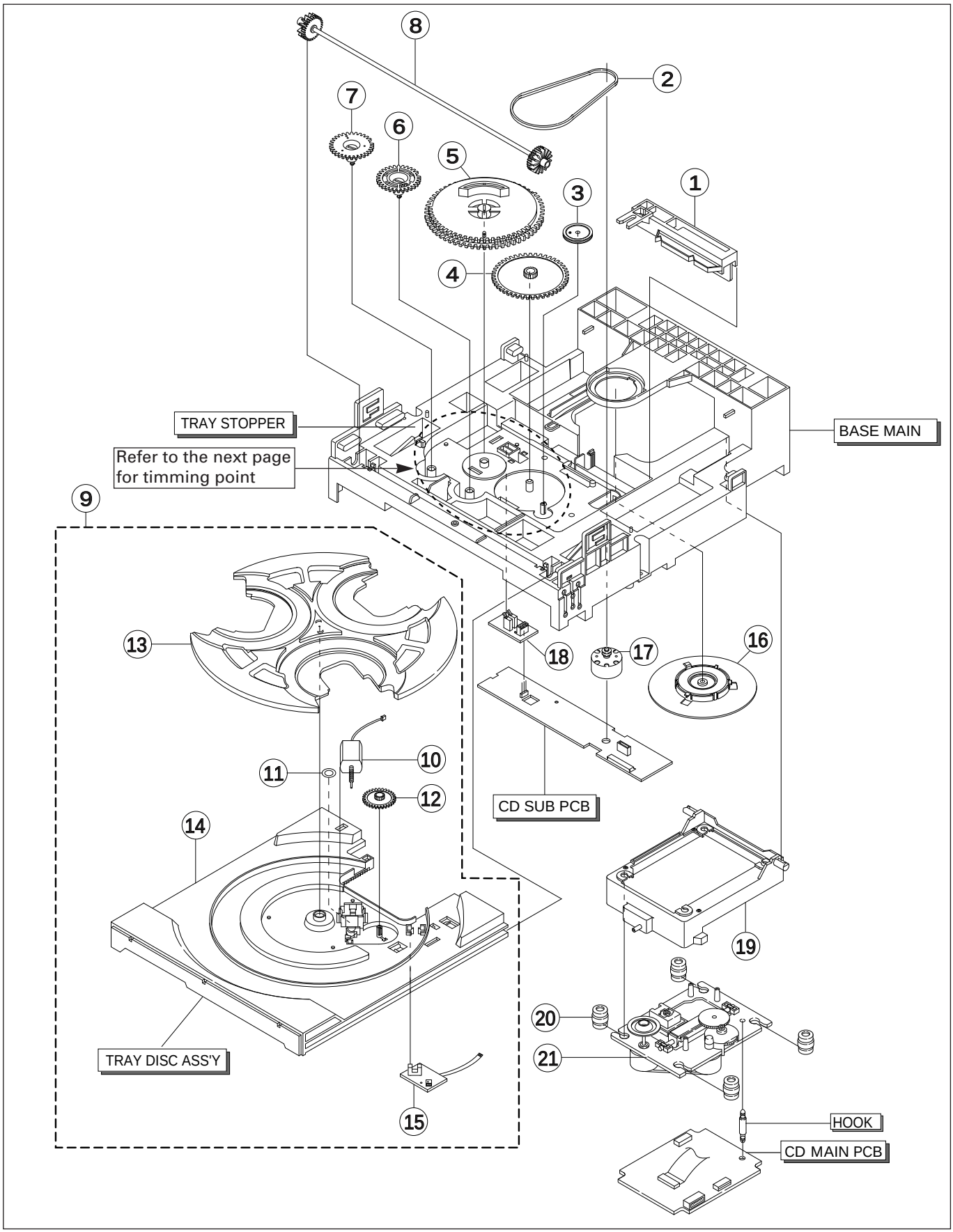

8
2
7
6
5
3
1
4
TRAY STOPPER
BASE MAIN
Refer to the next page
for timming point
9
13
18
17
16
11
10
12
CD SUB PCB
14
19
20
21
TRAY DISC ASS'Y
15
HOOK
CD MAIN PCB

Fig. 3-5

* When removing, take extreme care not to damage the hook.
1. Open the Tray Disc Ass'y by turning the Gear-Load (⑤) in the direction of open, then remove the Wire-Tray (㉕) .
2. Remove two Tray-Stopper and tray.

3-5-1 Tray Disassembly

1. Remove the Tray-Roulette (⑬) from the Tray-Disc Ass'y (⑭) by releasing the hook.
2. Remove the PCB-Sensor Ass'y (⑮) from the tray by releasing the hook.
3. Remove the Worm-Motor Ass'y (⑩) from the Tray-Disc Ass'y (⑭).
4. Remove the Cushion-Motor (⑪) from the Tray.
5. Remove the Gear-Roulette (⑫) from the Tray-Disc Ass'y (⑭) by releasing the hook.

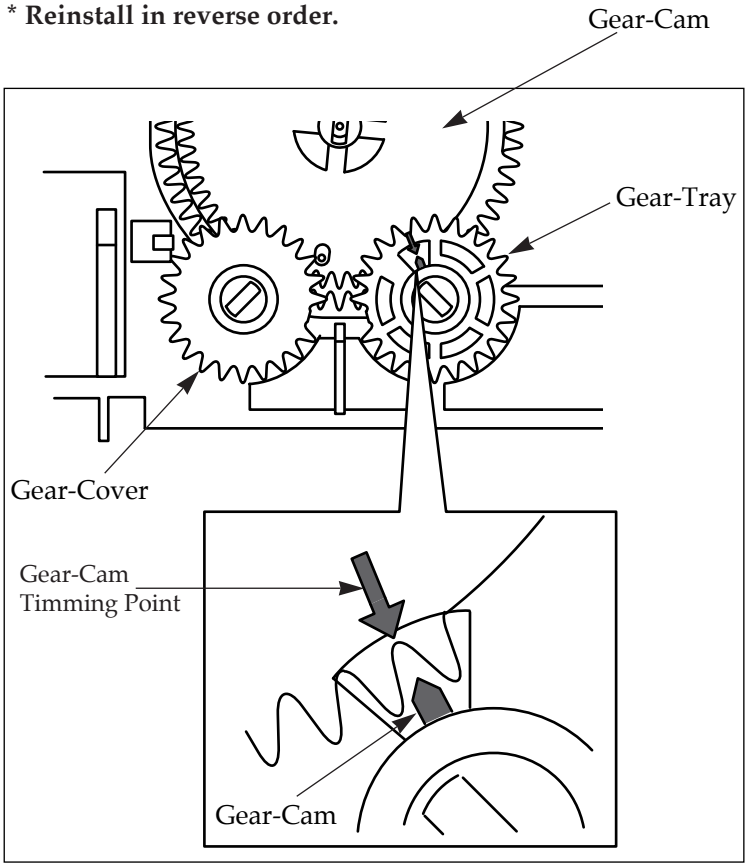
3-5-2 Main Disassembly

1. Remove the Table-Chuck Ass'y (⑯) from the Base-Main by turning it.
2. Push the Slider-Cam (①) towards right, then lift it up to remove.
3. Remove the Gear-Tray (⑥) from the Base-Main by releasing the fixed hook.
4. Remove the Gear-Converter (⑦) from the Base-Main by releasing the fixed hook.
5. Remove the Gear-Cam (⑤) from the Base-Main by releasing the fixed hook.
6. Remove the Belt (②) from the Pulley-Motor Ass'y (⑰) & the Gear-Pulley (③).
7. Remove the Gear-Pulley (③) from the Base-Main by releasing the fixed hook.
8. Remove the Gear-Load (④).
9. Remove the Gear-Synchro (⑧).
10. Desolder two soldering points of the CD SUB PCB, then remove it from the Base-Main by releasing the hook.
11. Remove the Pully-Motor Ass'y (⑰) by releasing the hook.
12. Remove the PCB-SW Ass'y (⑱) by releasing the hook.

3-5-3 CD Main PCB Disassembly

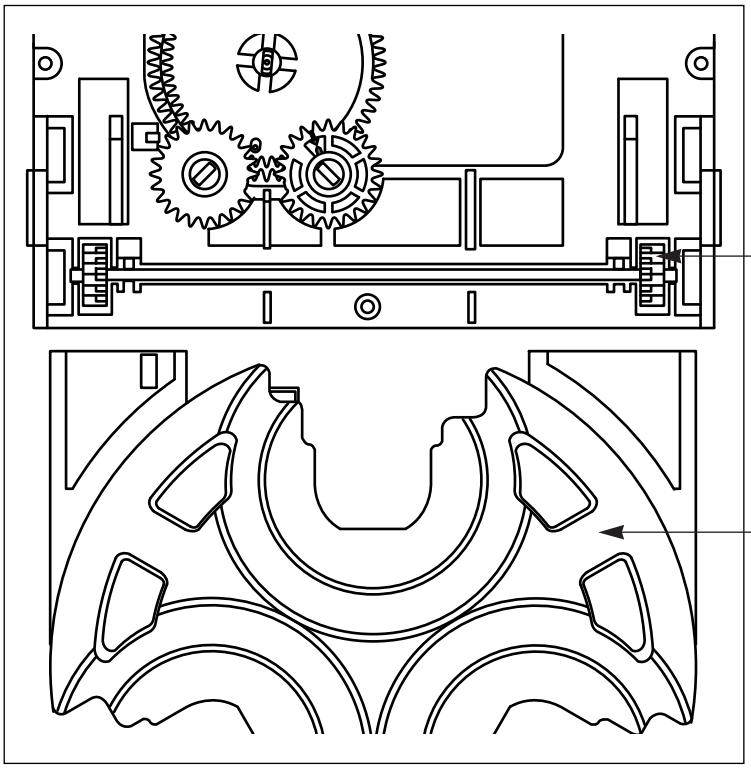
1. Remove the Lever-Lifter (⑲) from the Base-Main by releasing two hooks.
2. Remove four Rubber-CD (⑳) from the Lever-Lifter and then remove the Deck-CD (㉑).
3. Remove the Hook .
4. Remove the CD Main PCB with the soldering iron.

* **Reinstall in reverse order.**



* Align the Gear-cam with the gear-Tray as shown in Fig.3-6, then mount the Tray-Disc.

Fig. 3-6



* When assembling the Tray-Disc, take extreme care not to engage with Gear-Synchro.

Fig. 3-7

3-6 CD Deck

1. Remove the Shaft ① .
2. Lift the P/U ② .
   Note : Take extreme care not to touch the surface of lens.
3. Lift the Center-ring ③ .
4. Remove the Spring-T/Table ④ .
5. Remove the Turn-Table (M) ⑤ .
6. Remove 2 screw ⑥ and then remove the Spindle-Motor ⑦ .
7. Remove the Cover-Gear ⑧ by pushing the hook.
8. Remove the Gear(c) ⑨ by pushing the hook.
9. Lift the Gear(b) ⑩ .
10. Remove the Gear(a) ⑪ .
11. Remove 2 screws ⑫ and then remove the Feed-Motor ⑬ .
12. Remove the Chassis-Deck(M) ⑭.

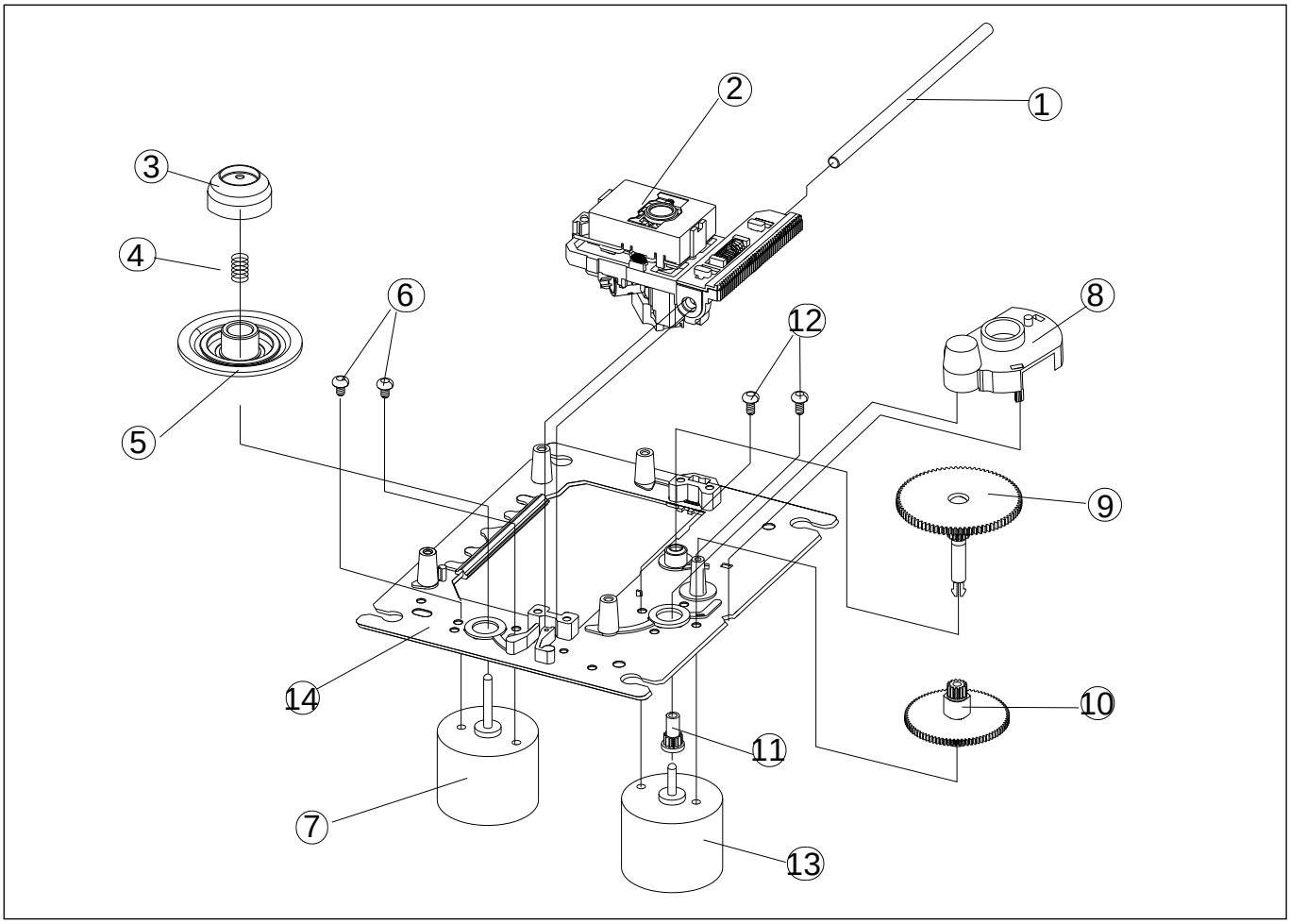
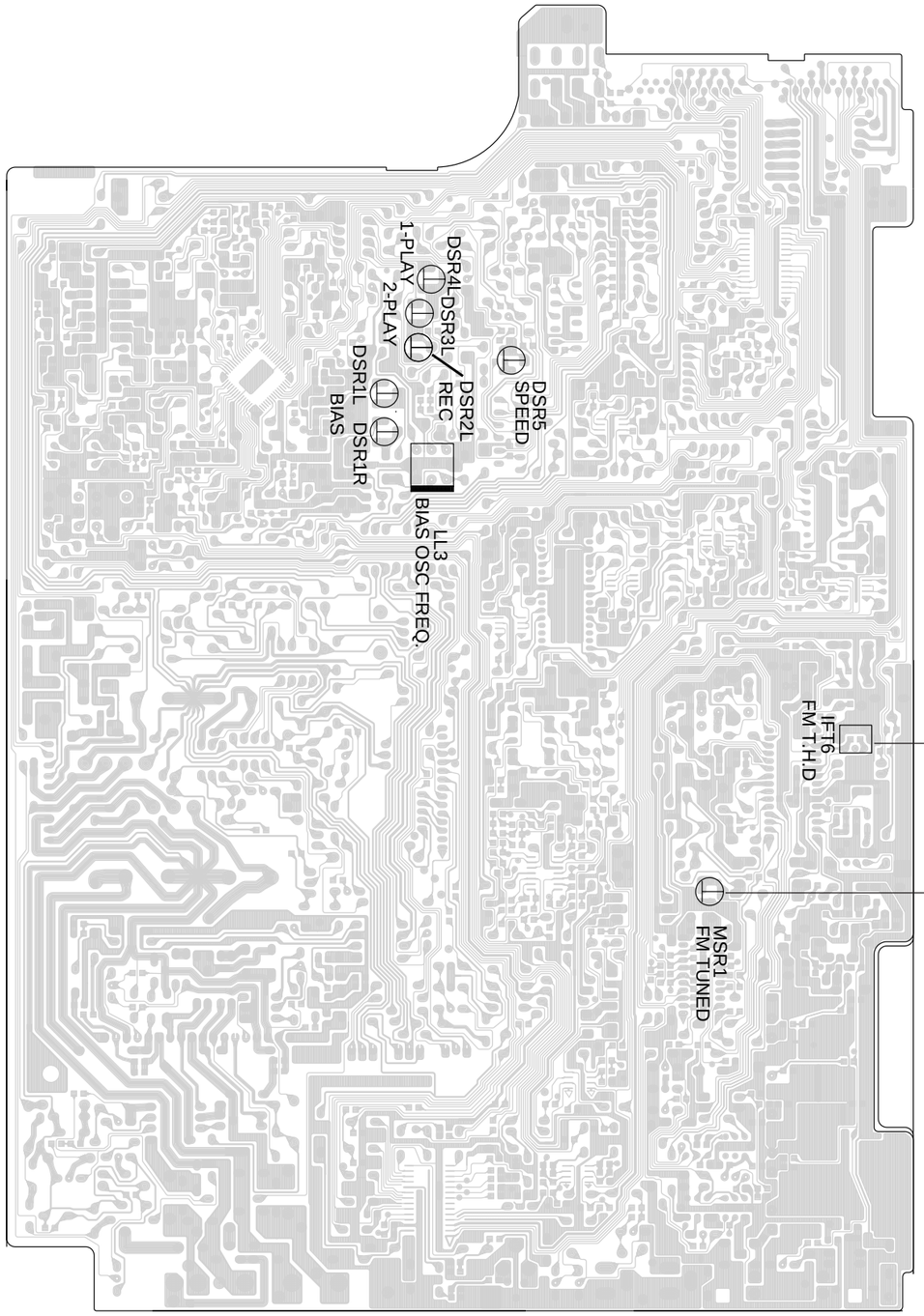


Fig. 3-8

4-1 Tuner



FM T.H.D Adjustment	
SSG FREQ.	98MHz
Adjustment point (IFT6)	FM DETECTOR COIL
Minumum output(Fig.1)	

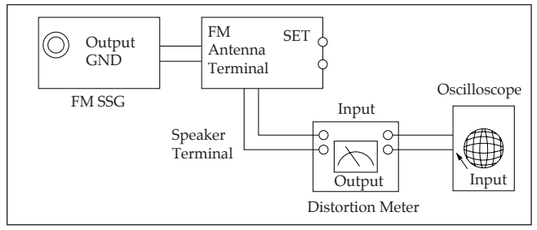


Fig.1 IF CENTER and T.H.D Adjustment

FM Search Level Adjustment	
SSG FREQ.	98MHz
Adjustment point (MSR1)	SEMI-VR(5KB)
"TUNED" is shown on FLT(Fig.2)	

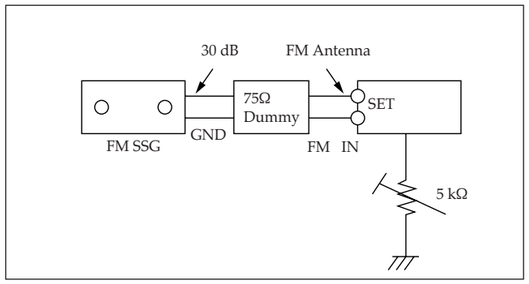


Fig. 2 FM Auto Search Level Adjustmet

4-2-1 To Adjust Tape Speed

NOTES

1) Measuring tape: i) MTT-111 (or equivalent)
(Tapes recorded with 3KHz)
ii) MTT-5512 (or equivalent)
2) Connect the cassette deck to the frequency counter as in Fig. 1.

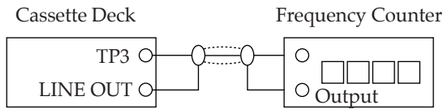


Fig. 1

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	NOR SPEED Control counter	OUT (connected to the frequency counter)	1) A-Deck: MTT-111 2) Press PLAY SW button 3) B-Deck: Same as below	Turn DSR5 to left and right.	3KHZ ±1%	
2	HI SPEED Control	Same as above	1) A-Deck: MTT-111 2) B-Deck: MTT-5512 3) Press Hi Speed dubbing switch	Fixed	5700~6300KHz	Check

4-2-2 To Adjust Replay Head

NOTES

1) Before the actual adjustment, clean the replay/recording head.
2) Measuring tape :
i) MTT-114NA (or equivalent 12.5 kHz AZIMUTH control).
ii) MTT-150 (or equivalent : Dolby level 200mwb/m)
3) Dolby NR SW OFF
4) The cassette deck is connections as shown in fig. 3.

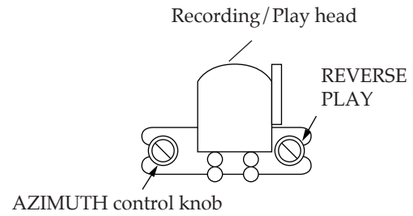


Fig.2

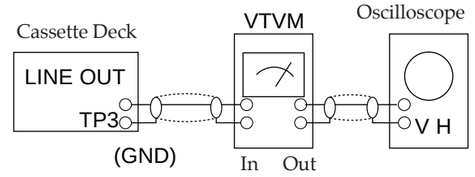


Fig. 3

¤ Adjust 1-Deck Replay Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP3 OUT (VTVM is connected to the scope)	After putting MTT -114NA into Deck 1. 1) Press FWD PLAY button. 2) Press REV PLAY button.	1)Turn the control knob to as shown in Fig.2. 2) Adjust the right control screw to playback Rev. Mode.	Max output and same phase (both channels).	After adjustment secure it with REGION LOCK.
2	PlayBack out Level	Same as above	PLAY MTT-150 on Deck1.	L-CH :Turn DSR3L to the right and left R-CH : Fixed	100mV ±0.5dB	See the diagram for adjustment locations

¤Ł Adjust 2-Deck Replay Level

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	AZIMUTH	TP3 OUT (VTVM is connected to the scope)	After putting MTT -114NA into Deck 2. 1) Press FWD PLAY button. 2) Press REV PLAY button.	1)Turn the control knob to left and right as shown in the Fig.2. 2) Adjust the right control screw to playback Rev. Mode.	Max output and same phase both channels.	After adjustment secure it with REGION LOCK.
2	PlayBack out Level	Same as above	PLAY MTT-150 on Deck2.	L-CH :Turn DSR4L to the right and left R-CH : Fixed	100mV ±0.5dB	See the diagram for adjustment locations

4-2-3 To Adjust PlayBack

NOTES

1) Connect the measuring instruments as shown in Fig. 4.
2) Set the DOLBY NR Switch off.
3) Measuring tape :
   MTT-5512 (or equivalent : normal recording)
4) The input signals supply 400Hz 400mV into AUX IN of AMP (AUDIO OSC).

Step	Item	Pre-Setup Condition	Pre-Setup	To Adjust	Standard	Remark
1	Normal electric current for recording	Connect to TP2 as in Fig. 4 and read VTVM	Insert MTT-5512 into Deck 2, then press REC button.	L-CH : DSR2L to the right and left. R-CH : Fixed	VTVM 400mV±5%	See diagram for adjustment locations.
2	BIAS OSC. FREQUENCY	Connect the frequency counter to TP	Insert MTT-5512 into Deck 2, then press REC button.	Turn BIAS oscillator frequency coil (LL3) to the right and left.	105KHz ±5%	See diagram for adjustment locations.
3	BIAS electric current	Connect to TP1 as in Fig.4 and read the VTVM	Insert MTT-5512 into Deck 2, then press REC button.	L-CH : DSR1L and R-CH: DSR1R to the right and left.	VTVM (7V±5%)	See diagram for adjustment locations.

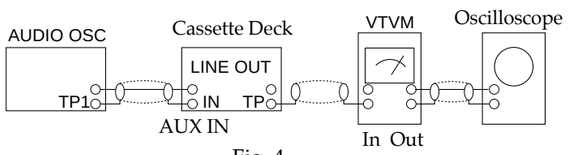
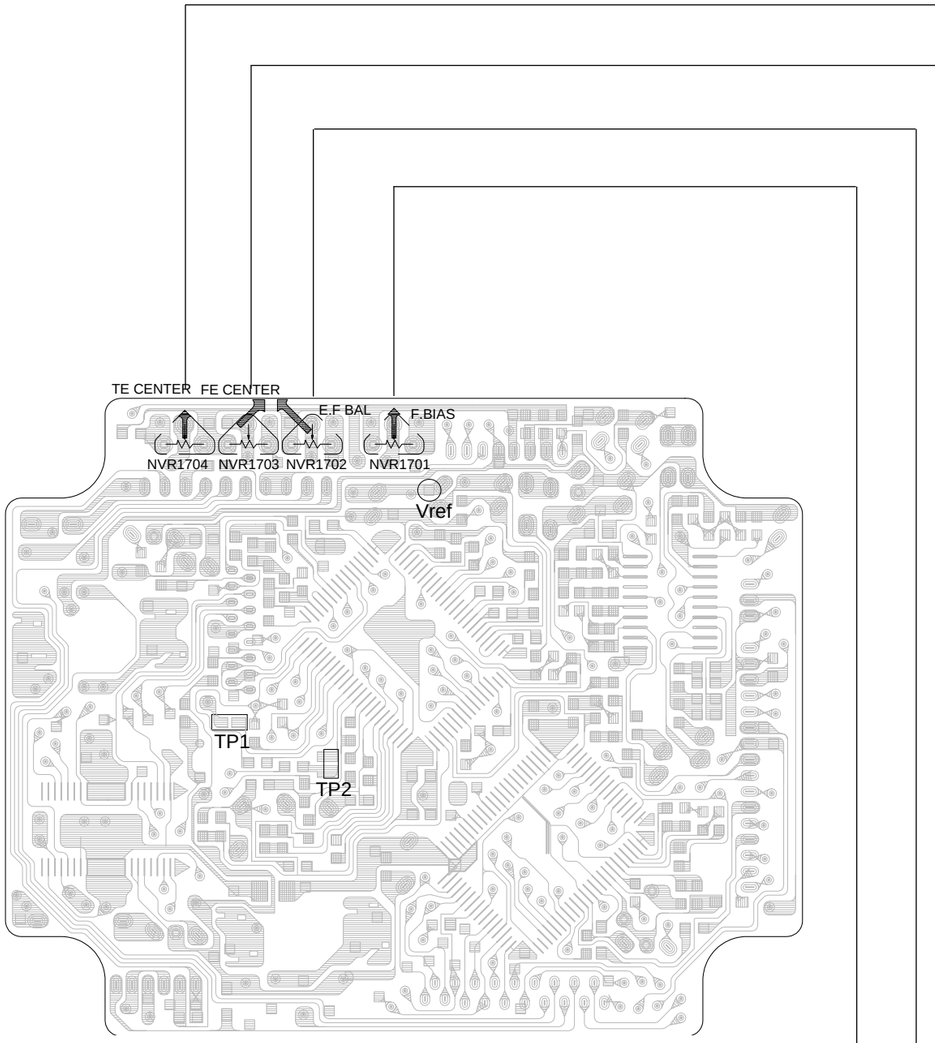


Fig. 4



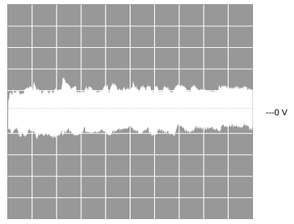
4-3-1 To Adjust FOCUS BIAS(STOP mode)

1. Set Volt/Div of the oscilloscope to DC 100mV.
2. Ground the scope input and set the waveform to 0V, DC range.
3. Connect the GND terminal of the oscilloscope to VR, and (+) terminal to center of TP1.
4. Set NVR1701 to 0mV.

4-3-2 To Adjust Tracking Gain (PLAY mode)

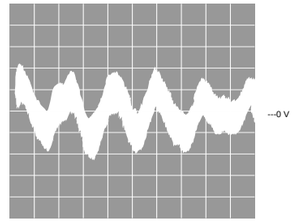
1. Connect the GND terminal of the oscilloscope to VR and (+) terminal to TP2.
2. Load and play the disc
3. While the disc is running adjust the gain with NVR1704 as shown below.

Normal frequency



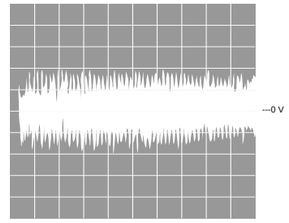
VOLT/DIV : 0.2V
TIME/DIV : 2mS

Low frequency



VOLT/DIV : 0.2V
TIME/DIV : 2mS

High frequency

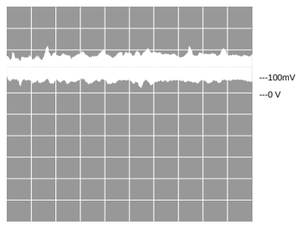


VOLT/DIV : 0.2V
TIME/DIV : 2mS

4-3-3 To Adjust Focus Gain (PLAY mode)

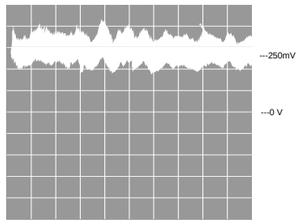
1. Connect the GND terminal of the oscilloscope to VR and (+) terminal to TP1.
2. Load and play the disc.
3. While the disc is running adjust the gain with NVR1703 as shown in the following figure.

Normal frequency



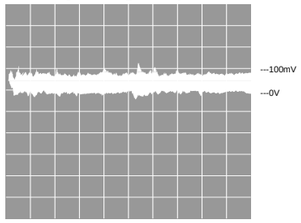
VOLT/DIV : 0.1V
TIME/DIV : 2mS

Low frequency



VOLT/DIV : 0.1V
TIME/DIV : 2mS

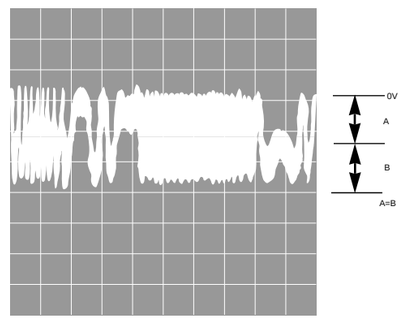
High frequency



VOLT/DIV : 0.1V
TIME/DIV : 2mS

4-3-4 To Adjust E/F Balance (PLAY mode)

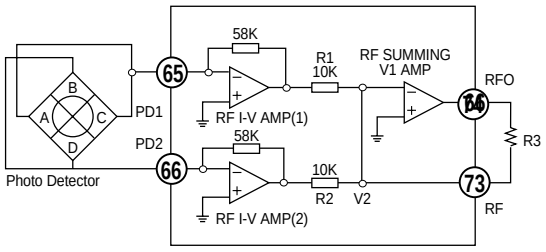
1. Set TIME/DIV of the oscilloscope to 2mS.
2. Set Volt/DIV of the oscilloscope to 0.5V.
3. Ground the scope input and set to DC. and then set the DC range.
4. Connect the GND terminal of the oscilloscope to VR and (+) terminal to center to TP2.
5. Load and play the disc.
6. Turn NVR1704 counterclockwise to the minimum value.
7. Raise NVR1702 and adjust the waveform so that its middle comes to GND of the oscilloscope (or until the upper half of waveform becomes symmetrical to the bottom half, A=B)
8. Adjust NVR1704 (arrow) for normal sound.



5. Special Circuit Descriptions

5-1 CD

5-1-1 RF Amp (KA9220) : NIC9220



RF I-V Amp(1) and RF I-V Amp(2) are converted to voltage via internal resistance of 58kΩ from the current of PD1(A+C) and PD2(B+D): This voltage is added to RF summing amplifier.
The signal (A+B+C+D) is applied to RFO (No. 2 terminal).
RF output voltage is calculated as follows :

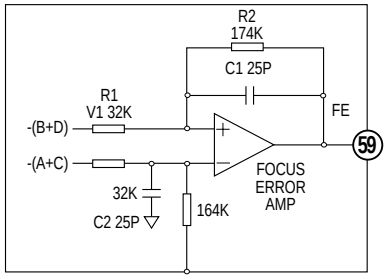
$$V_{RF} = -R3 \times (iPD1 + iPD2)$$

$$= -R3 \times (V_1/R_1 + V_2/R_2)$$

$$= -R3 \times \left(\frac{V_1}{10K} + \frac{V_2}{10K}\right)$$

$$= -\frac{R3}{10K} \times (V_1 + V_2)$$

5-1-2 FOCUS ERROR Amp(KA9220) : NIC9220



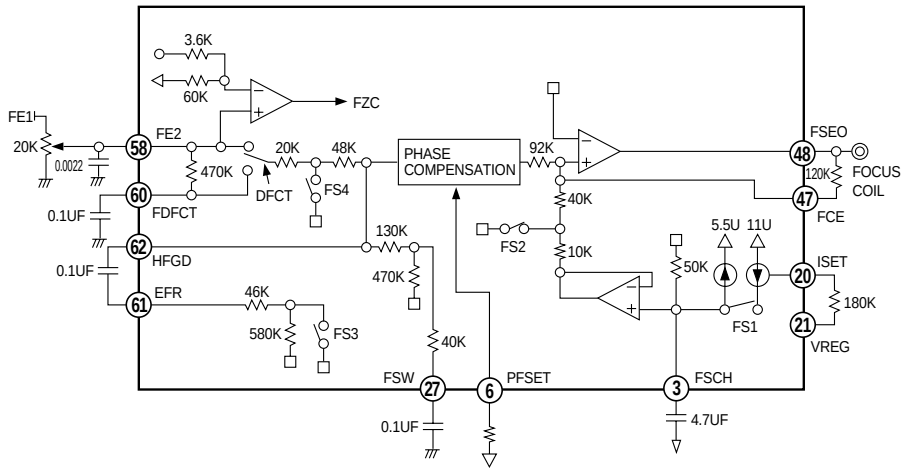
FOCUS ERROR Amp is the circuit which amplifies the difference between RF I-V Amp(1) output (A+C) and RF I-V Amp(2) output(B+D).
These two signals are supplied to (-) and (+) input terminals of FOCUS ERROR Amp. The FOCUS ERROR signal resulting from this difference voltage is applied to FE (Terminal No.57).
The FE output voltage of this low frequency component varies according to {(A+C) - (B+D)}.
VFE is calculated as follows :

$V_{FE} = (R2/R1) \times (V2\text{-}V1) = 5.4(V2\text{-}V1)$

This FOCUS ERROR voltage is sent to FOCUS SERVO .

5-1-3 FOCUS SERVO SYSTEM (KA9220) : NIC9220

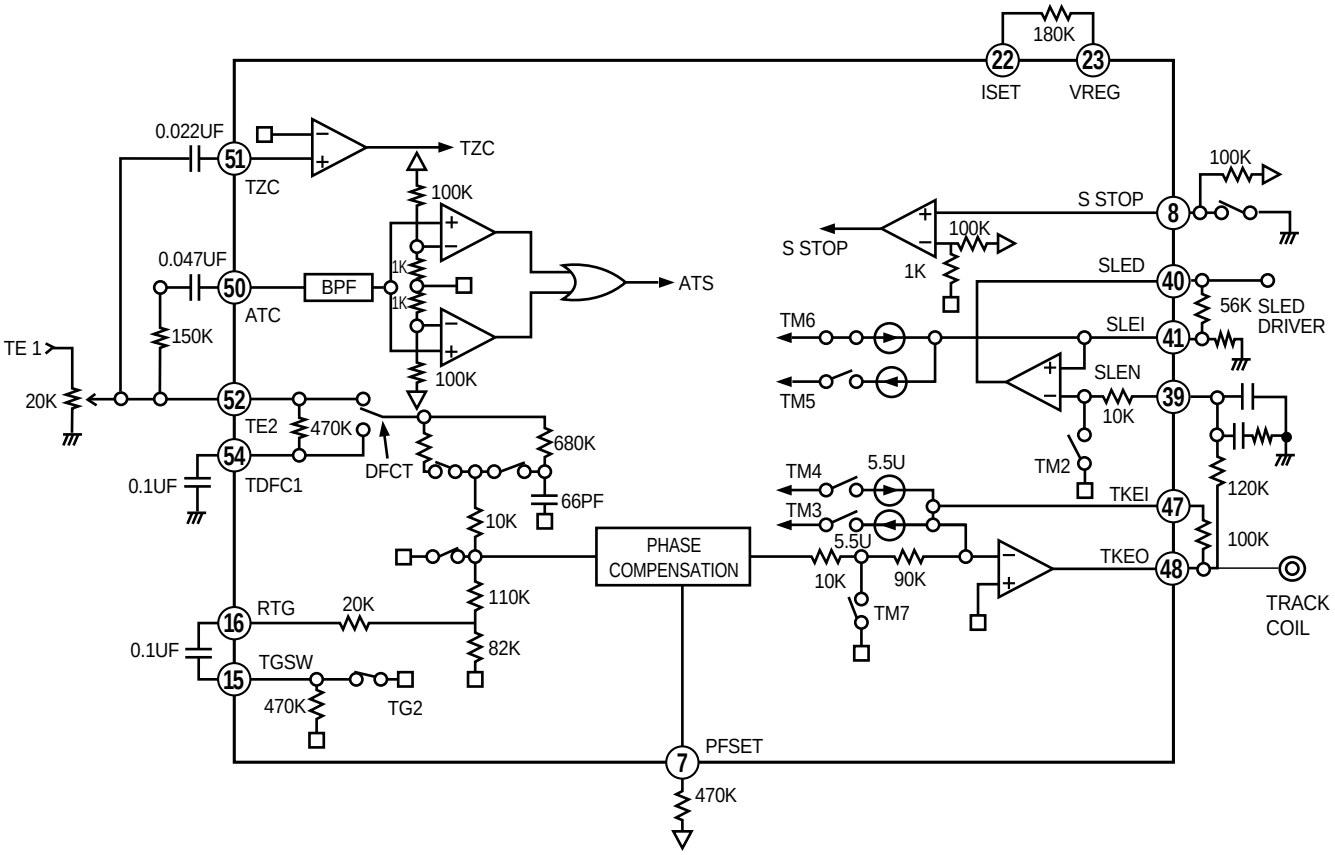
When FS3 is ON, high frequency gain decreases (time constant set by pin17, pin19, and capacitor connected to internal resistance).
The capacitor between pin 18 and GND sets the time constant to pass the low frequency operated in PLAY mode.



The maximum frequency of focus phase compensation is inversely proportional to the resistance connected to pin 7. Focus search peak is about 1.1 Vp-p, and is inversely proportional to the resistance connected to pins 22,23 (if this resistance changes, the peak of track jump and sled kick change).
The inversion input of FZC comparator is set to 5.7% of the difference between Vcc and VC(pin69) {{5.7% x (Vcc-Vc)}.
Note : If the resistance connected to pin7 changes, the phase compensation peak of focus, tracking, sled servo changes. At the same time, 'op-amp' dynamic range and offset voltage also change.

5-1-4 TRACKING SLED SERVO SYSTEM (KA9220) : NIC9220

The capactor between pin 15 and 16 attenuates the high frequency when TG2 is off. The maximum frequency of tracking phase compensation is inversely proportional to the resistance connected to pin 7 (about 1.2kHz at 470k). The tracking jump (FWD and REV) is decided when TM3 and TM4 are ON, and the peak voltage induced from tracking coil is decided by the both TM3 and TM4 current values and feed back resistance of pin 47.
Track jump max voltage = TM3 (TM4) current x feedback resistance.



FWD or REV sled kick occnrs when TM5 or TM6 is ON, and the peak voltage added to sled motor is decided by TM5 or TM6 current and the feedback resistance of pin 41.
Sled jump max. voltage = TM5(TM6) current x feedback resistance
Each SW current is decided by the resistance connected to pin 22 and 23.
When the resistance is about 150Ω,

TM3 or TM4 = 11μA,

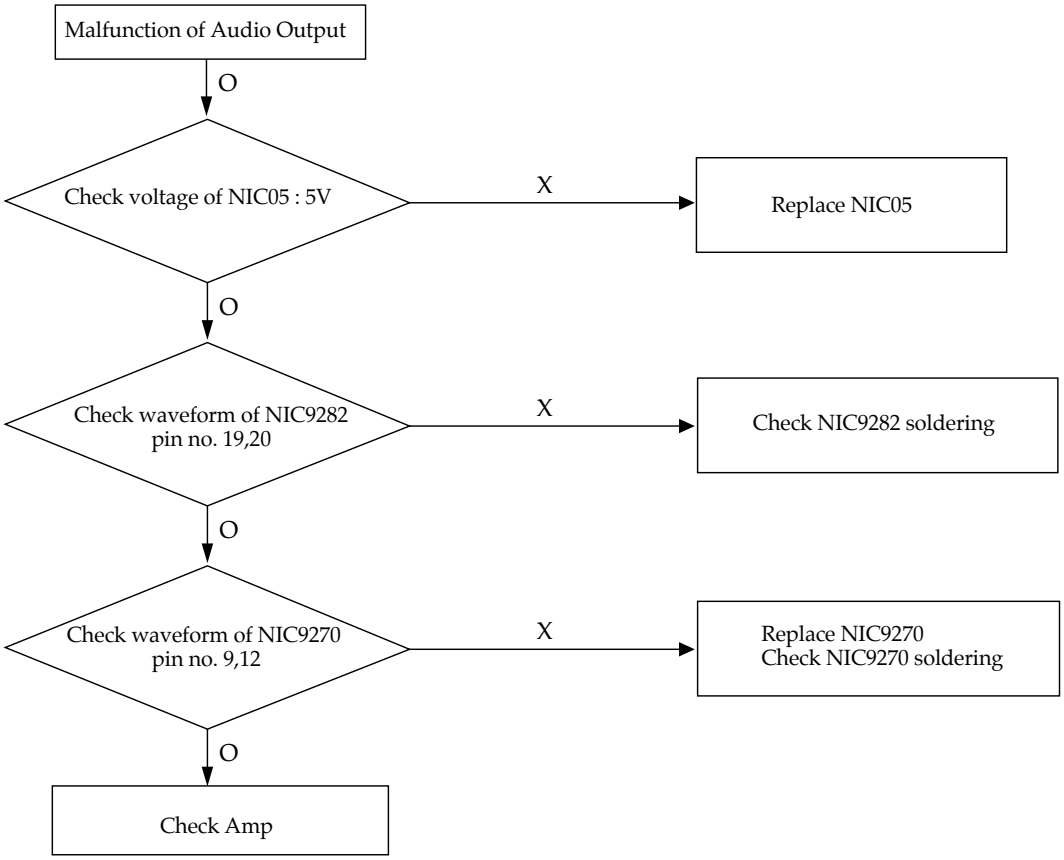
TM5 or TM6 = 22μA,

This current is inversely proportional to the resistor, variable within a range of t 5 to 40 μA for TM3.
STOP is the ON/OFF detection signal for the limit SW (or the sled motor's innermost cirumference).

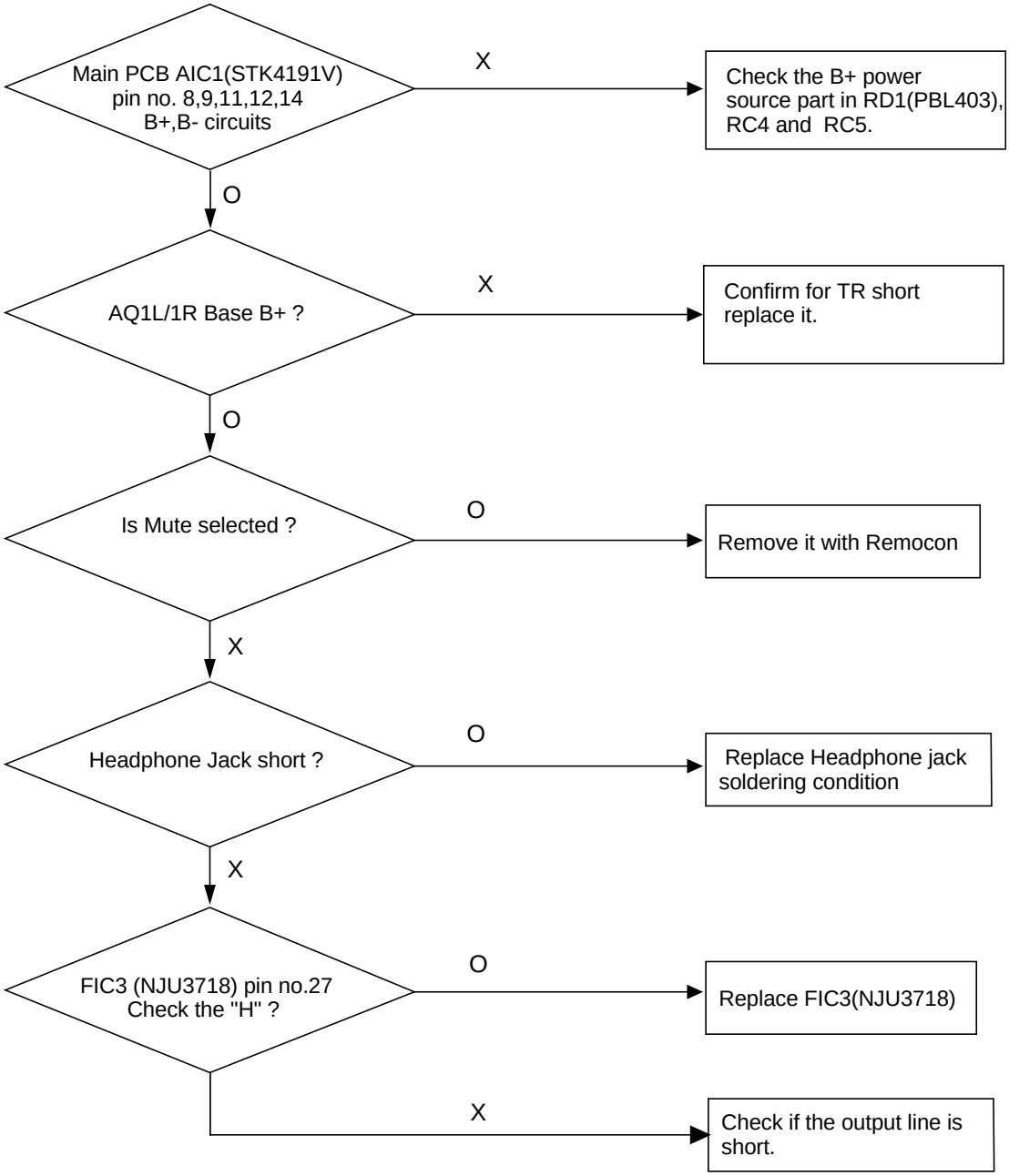
6. Troubleshooting

6-1 Amplifier

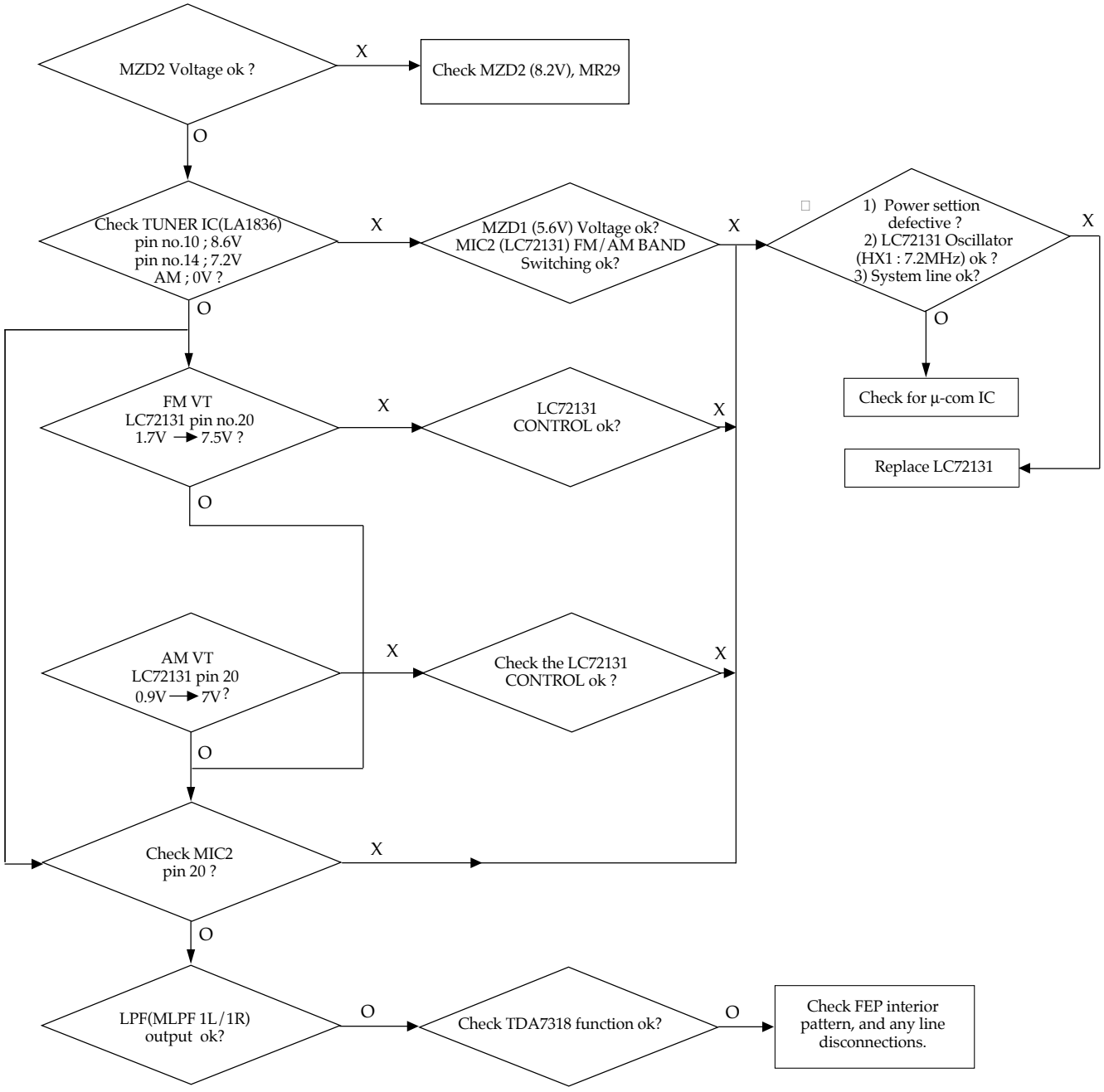
6-1-1 Power Malfunction



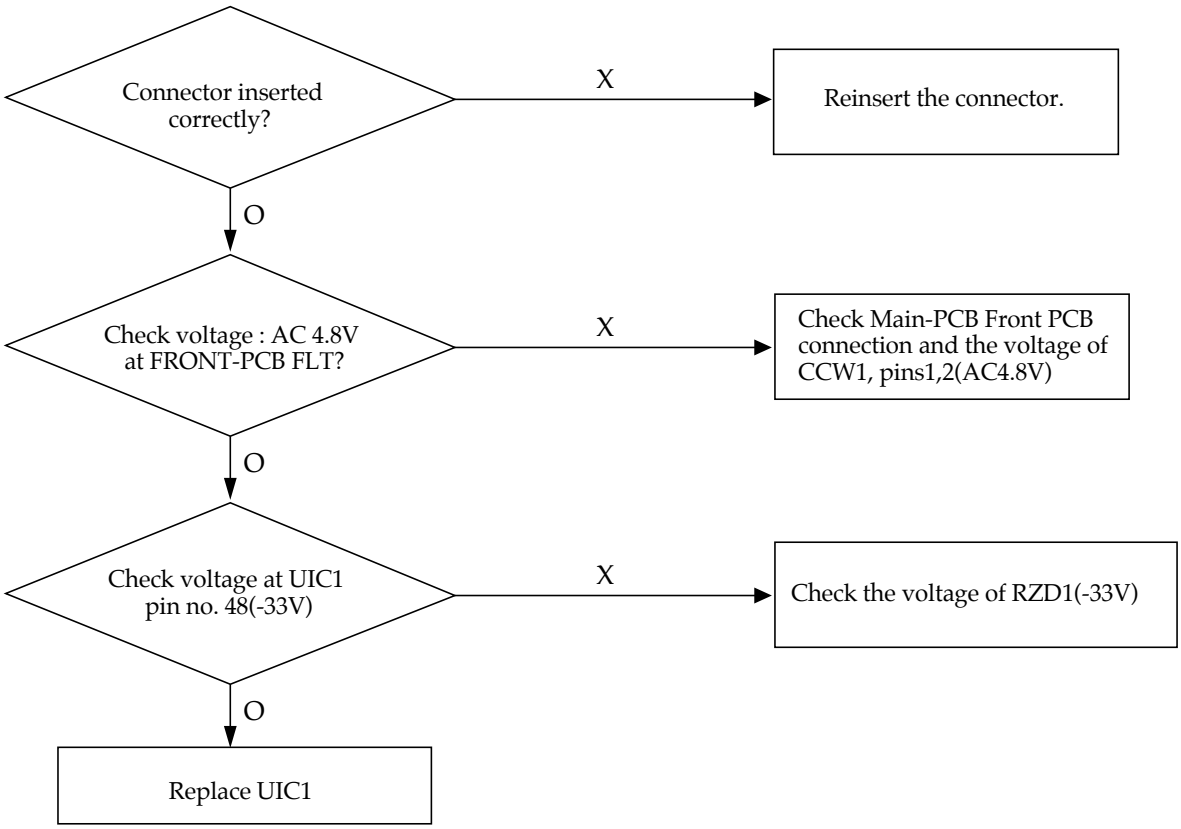
6-1-2 No Output



6-1-3 Tuner Malfunction (FM/AM)

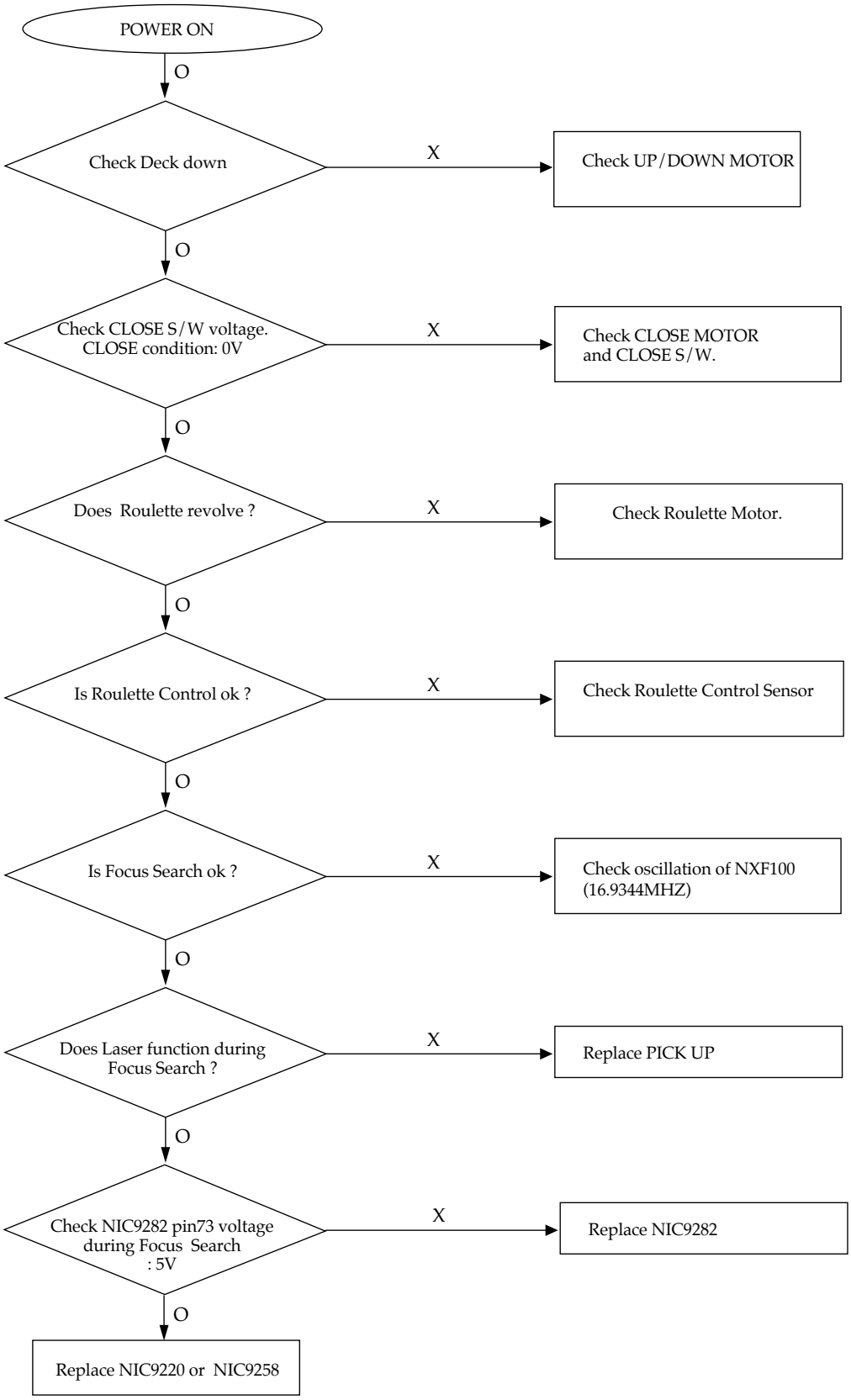


6-1-4 V.F.D Malfunction

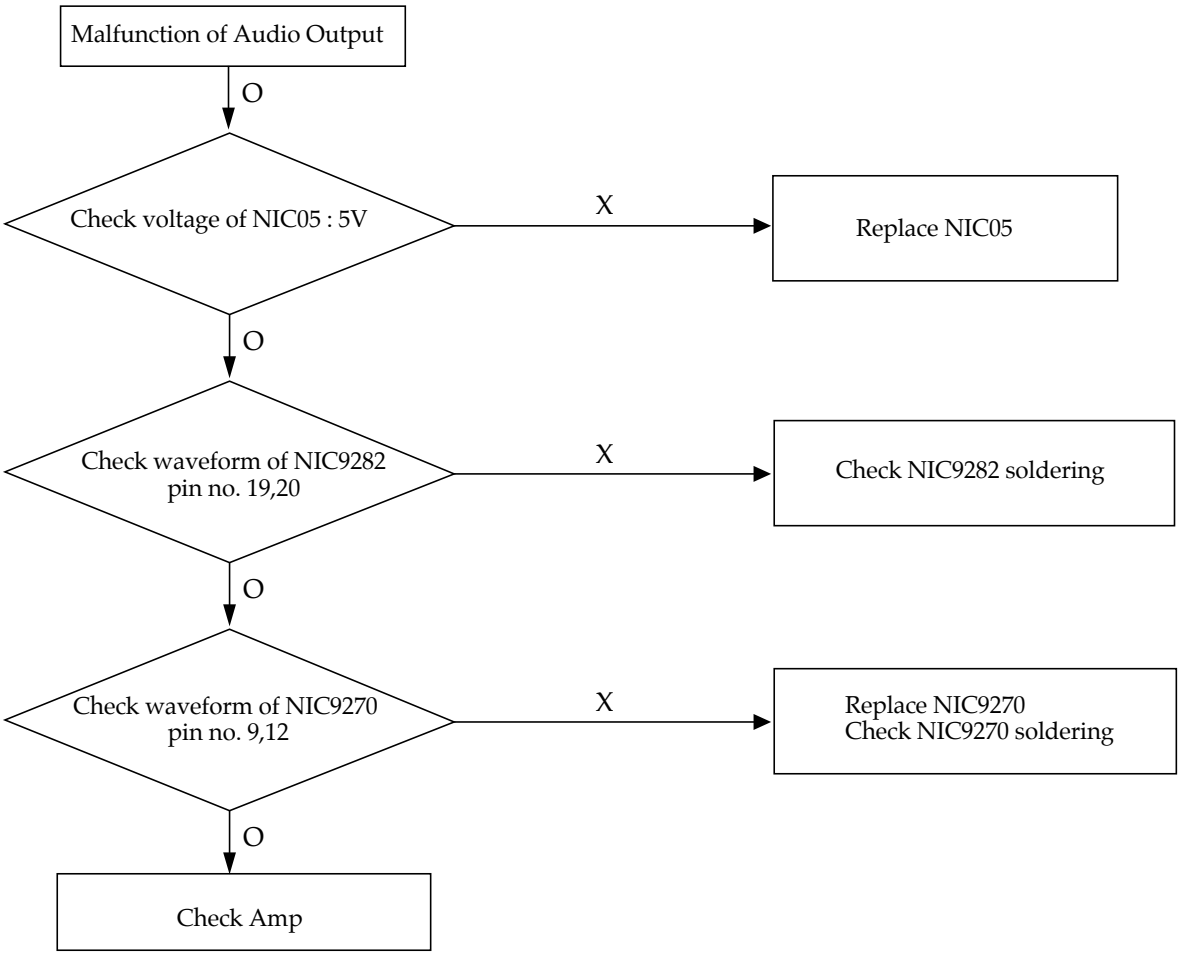


<table>
<tr><th>Block</th><th>Main Function</th><th>Check Point</th></tr>
<tr><td rowspan="2">TAPE IC JIC1
(BA3442AKS)</td><td>Convert of P/B & R/P SIGNAL &
DECK OUTPUT OF IC</td><td>Check for voltage at PIN32
1 P/B Deck : L
2 R/P Deck : H
Check for pin24 of FIC3 when deck operate</td></tr>
<tr><td>AMPS</td><td>Check for voltage at pin28
When between song : High (Normal)
When playing song : Low (Normal)</td></tr>
<tr><td rowspan="2">DOLBY NR AMP
DIC1 (KA2271)</td><td>Convert P/B & SOURCE SIGNAL</td><td>Check for voltage at pin4
R/P mode : High
R/p mode : Low
Dubbing mode : High
When in operative FIC3 pin 26 check
<table><tr><th>Mode</th><th>FIC3 pin12</th></tr><tr><td>P/B</td><td>H</td></tr><tr><td>R/P</td><td>L</td></tr><tr><td>DUBBIN</td><td>H</td></tr></table></td></tr>
<tr><td>Convert DOLBY NR ON/OFF</td><td>DIC1 pin13 check
<table><tr><th>Mode</th><th>FIC3 pin25</th></tr><tr><td>OFF</td><td>H</td></tr><tr><td>ON</td><td>L</td></tr></table></td></tr>
<tr><td>BIAS OSC</td><td>Oscillate RECORD BIAS (105KHZ)</td><td>TP2 check
Osc Frequency : 105KHz
When inoperative : LQ4,LQ5 check</td></tr>
<tr><td></td><td>Oscillate RECORD BIAS (105KHZ)</td><td>DQ1,1R, Gate check
<table><tr><th>Mode</th><th>DQ1L/1R</th></tr><tr><td>REC</td><td>-10V</td></tr><tr><td>PLAY</td><td>1.4V</td></tr></table></td></tr>
<tr><td>μ-com UIC1</td><td>Control DECK MECHA
Control VF DISPLAY
Control MUTE circuit
Control each circuit</td><td>Check for RESET
When power is turned ON.</td></tr>
<tr><td>VF DISPLAY</td><td>Drive VF DISPLAY</td><td>Check VF DISPLAY</td></tr>
</table>

6-3-1 Disc Revolution Malfunction

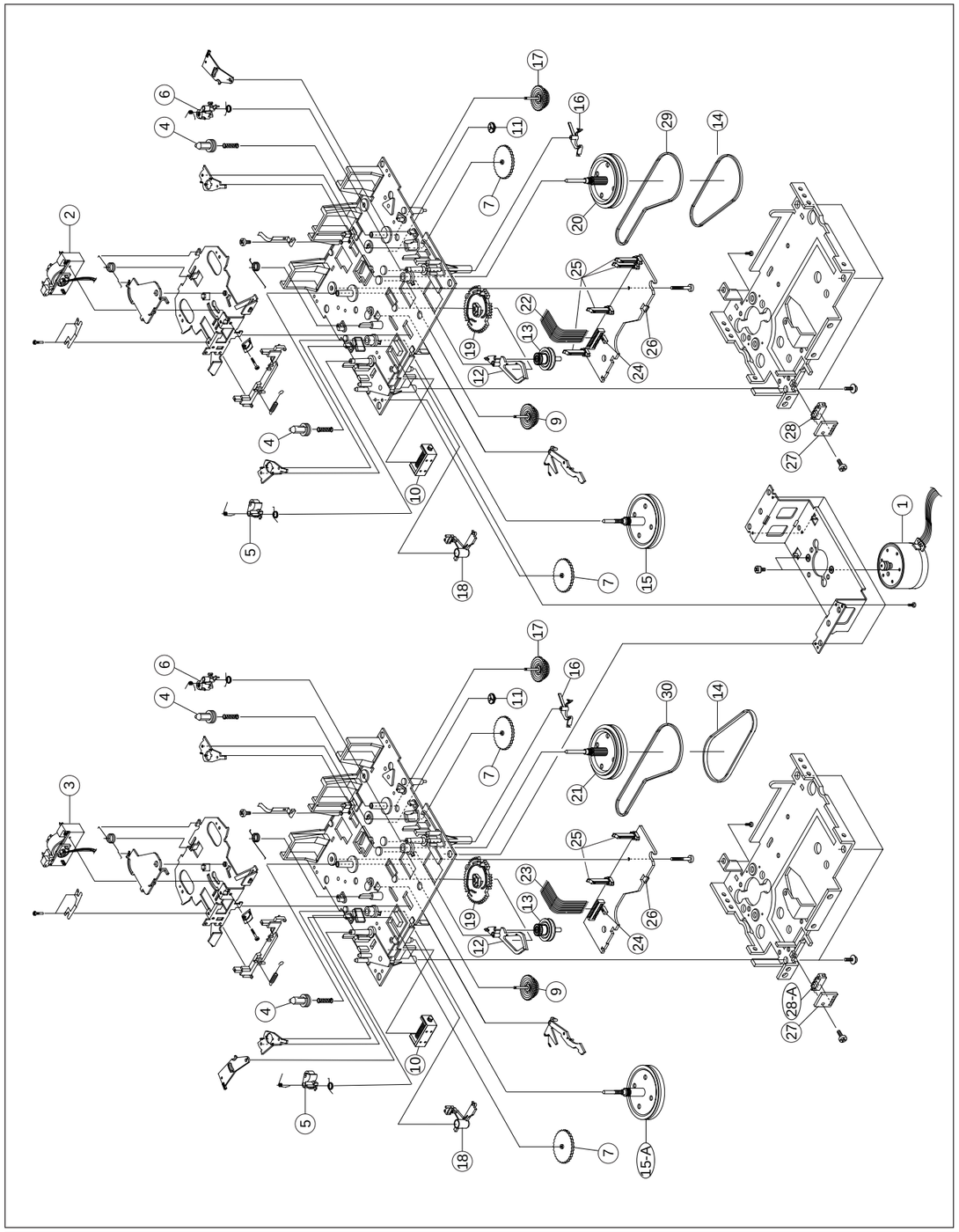


6-3-2 Audio Output Malfunction

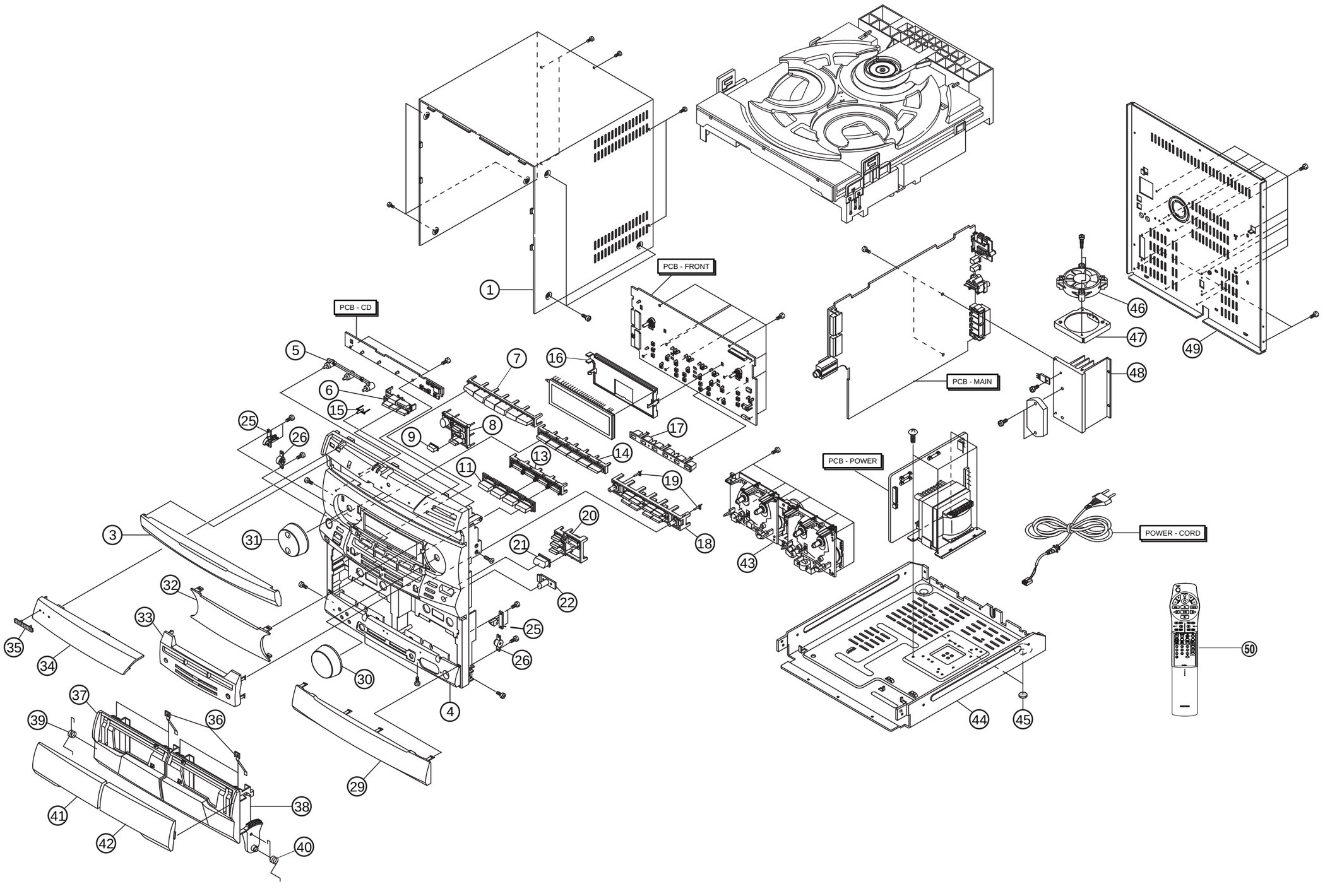


7. Exploded Views and Parts List

7-1 Cassette Deck Exploded View and Parts List



No.	New Code No.	Description	Specification	Old Code No.
	AH59-20004J	CASSETTE DECK	ADR2112TW	
1	AH81-10798A	MOTOR ASS'Y	SHU2L-DOUBLE	
2	AH81-10798C	HEAD ASS'Y(R/P)	YK56RBB4N3	
3	AH81-10798D	HEAD ASS'Y(P/B)	YK50PBB4N3	
4	AH81-10798E	SOLENOID ASS'Y	ADR2100-01	
5	AH81-10798F	CNTR ASS'Y(R/P)	ADR2100-02	
6	AH81-10798G	CNTR ASS'Y(P/B)	ADR2100-03	
7	AH81-10798H	FLYWHEEL ASS'Y(F)	ADR2100-04	
8	AH81-10798J	FLYWHEEL ASS'Y(R)	ADR2100-05	
9	AH81-10798K	PINCH ARM(F)	ADR2100-06	
10	AH81-10798M	PINCH ARM(R)	ADR2100-07	
11	AH81-10798N	CLUTCH ASS'Y	ADR2100-08	
12	AH81-10798P	MAIN BELT(R/P)	ADR2112TW-01	
13	AH81-10798S	MAIN BELT(P/B)	ADR2112TW-02	
14	AH81-10798U	SUB BELT	ADR2100-09	


PCB - FRONT
PCB - CD
PCB - MAIN
PCB - POWER
POWER - CORD
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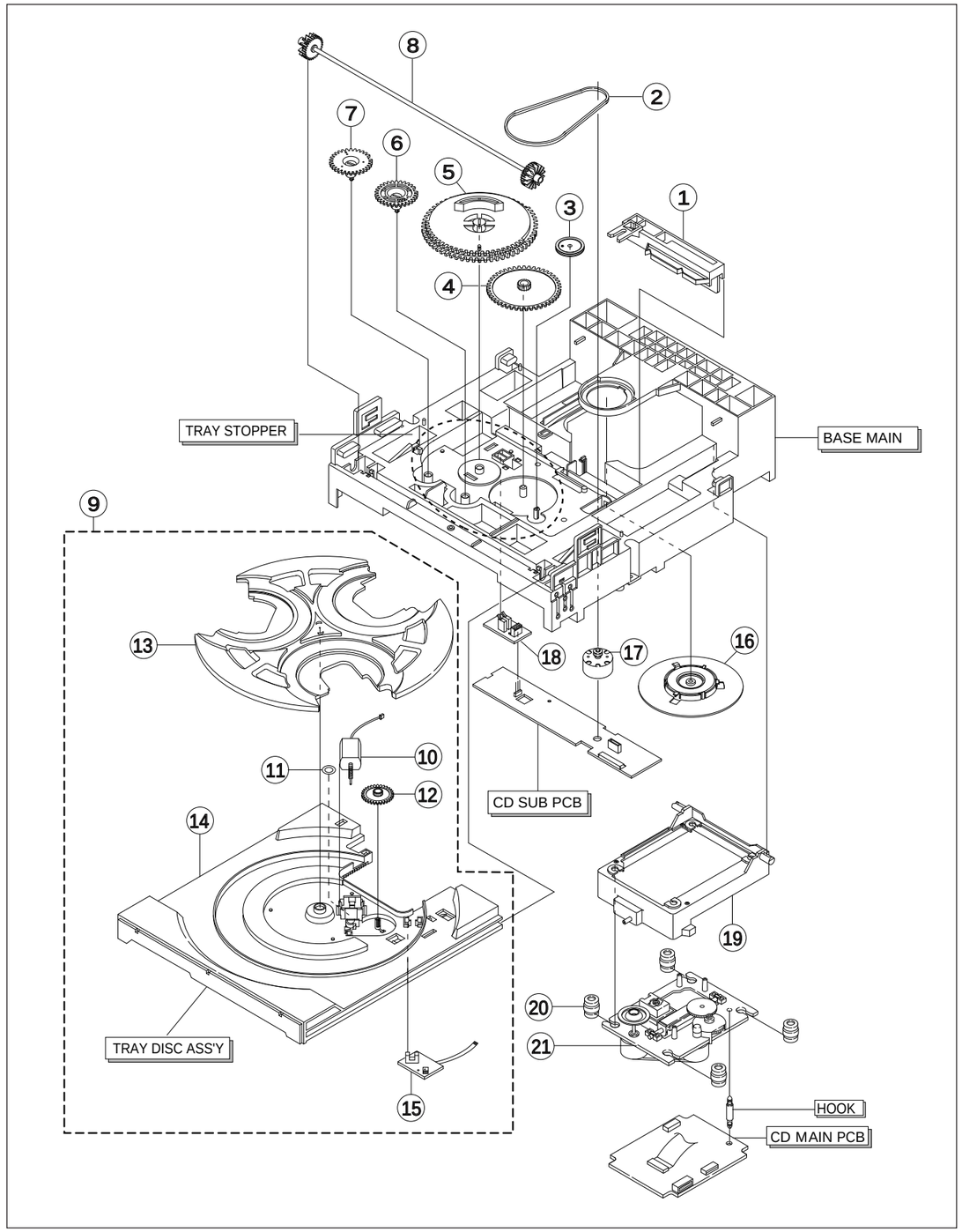
7-2 Main Parts List and Exploded View

No.	New Code No.	Description	Specification	Old Code No.
1	AH64-30351A	CABINET-TOP	PVC STEEL, T0.75 MAX630	
2	G3A8-3N/C	ASSY-CD PACK	G3A8 3N CKD	
3	AH64-50305B	DOOR-TRAY	ABS 94HB, BLK, MQ-630	
4	AH64-30350B	CABINET-FRONT	MIPS BLK, MAX-630	
5	AH69-10103A	LENS-SKIP	PMMA, TRP+TIO2, MAX630	
6	AH64-11003A	KNOB-OPEN/CLOSE	ABS 94HB, BLK, MAX630	
7	AH64-11005A	KNOB-DIRECTION	ABS 94HB, BLK, MAX630	
8	AH64-11008A	KNOB-POWER	ABS 94HB, BLK, MAX630	
9	AH67-10100C	LENS-AI OFF	PMMA, +TIO2, MAX630	
11	AH64-11004A	KNOB-FUNCTION	PMMA +TIO2 MAX630	
13	AH61-20355A	HOLDER-FUNCTION	ABS 94HB WHT MAX630	
14	AH64-10999A	KNOB-ENTER	ABS 94HB, BLK, MAX630	
15	AH67-10105A	LENS-JOG	PMMA +TIO2 MAX630	
16	AH61-20079A	HOLDER-VFD	ABS 94HB BLK MAX-380	13322-0145-00
17	AH61-20359A	HOLDER-DIRECTION	ABS 94HB WHT MAX630	
18	AH64-11006A	KNOB-DECK	ABS 94HB BLK MAX630	
19	AH67-10101A	LENS-KNOB	PMMA +TIO2 MAX630	
20	AH64-11007A	KNOB-SBS	ABS 94HB, BLK, MAX630	
21	AH67-10104A	LENS-SRS	PMMA +TIO2 MAX630	
22	AH67-10102A	LENS-REMOCON	PMMA BRN MAX630	
25	AH95-50001A	LATCH-ASSY	MAX555	
26	AH61-80030A	DAMPER-ASSY	POM, N0.8, G130,BLK,MAX630	
29	AH61-20358B	CAP-DUMMY	ABS 94HB BLK MAX-630	12689-0009-00
30	AH64-11011A	KNOB-VOLUME	ABS 94HB BLK MAX630	
31	AH64-11002A	KNOB-JOG	ABS 94HB BLK MAX630	
32	AH64-40350C	WINDOW-TUNER	PMMA, VIO,MAX-630	
33	AH61-20352E	CAP-FRONT	ABS 94HB BLK MAX-630	
34	AH64-40351C	WINDOW-CD	PMMA VIO MAX-630	
35	AH64-70003B	BADGE-BRAND	AL, L30	
36	AH61-60192A	SPRING TAPE	SUS, PI0.35, COM	
37	AH64-50303B	DOOR-CASS, A	ABS 94HB, BLK,MQ-630	
38	AH64-50304B	DOOR-CASS,B	ABS 94HB, BLK,MQ-630	
39	AH61-60305A	SPRING-DOOR, L	TS, SUS27,PI1.0 MAX-630	
40	AH61-60306A	SPRING-DOOR, R	TS, SUS27 PI1.0 MAX-630	16674-518-510
41	AH64-40352C	WINDOW-DOOR, A	PMMA VIO MAX-630	
42	AH64-40353C	WINDOW-DOOR, B	PMMA VIO MAX-630	
43	AH59-20004D	DECK-CASSETTE	CWA420R, LOGIC	
44	AH64-30352A	CABINET-BOTTOM	SECC, T1.0 MAX630	
45	AH64-80032A	FOOT-CUSHION	HH-38C T2.0 BLK MAX-630	
46	AH31-10020A	FAN-DC	D0620B-12M, 12VDC 10.16A	
47	AH61-10627A	BRKT-FAN	SECC T1.0 NTR MAX-630	17159-0093-00
48	AH62-30105A	HEAT-SINK, M	AL T6.0 WHT MAX-630	
49	AH64-30353C	CABINET-REAR	SECC T0.8 MAX-630	
50	AH59-10082E	REMOCON-ASSY	MAX-630	A3070-0112

7-3 CD MECHA Parts List

No.	New Code No.	Description	Specification	Old Code No.
1	AH66-80022A	SLIDER-CAM	ABS HF-380 NTR	
2	AH66-60034A	BELT-LOAD	CR	
3	AH66-20186A	GEAR-PULLEY	POM (M90-44) WHT	
4	AH66-20187A	GEAR-LOAD	POM (M90-44) BLK	
5	AH66-20188A	GEAR-CAM	POM (M90-44) WHT	
6	AH66-20189A	GEAR-TRAY	POM (M90-44) BLK	
7	AH66-20190A	GEAR-CONVERT	POM (M90-44) WHT	
8	AH66-20191A	GEAR-SYNCRO	ABS HF-380 NTR	
9	AH59-10097A	ASSY-TRAY DISC	CMS-300,ASS'Y-TRAY	
10	AH59-10098A	ASSY-WORM -MOTOR	CMS-300,ASS'Y-WORM	
11	AH69-20044A	CUSHION-MOTOR	NBR BLK	
12	AH66-20193A	GEAR-ROULETTE	POM (M90-44) BLK	
13	AH66-90056A	TRAY-ROULETTE	ABS XR-401 BLK	
14	AH66-90055A	TRAY-DISC	-,ABS,-,BLK	
15	AH59-10099A	ASSY-PCB SENSOR	CMS-300,ASS'Y SENSOR	
16	AH59-10100A	ASSY-TABLE CHUCK	CMS-300,ASS'Y CHUCK	
17	AH59-10101A	ASSY-PULLEY-MOTOR	CMS-300,ASS'Y CHUCK	
19	AH66-30086A	LEVER-LIFTER	ABS HF-380 BLK	
20	AH73-10016A	RUBBER-CD	IRR	
21	AJ59-20003F	DECK-CDP	DECK-CD *CMS-A30NG6	

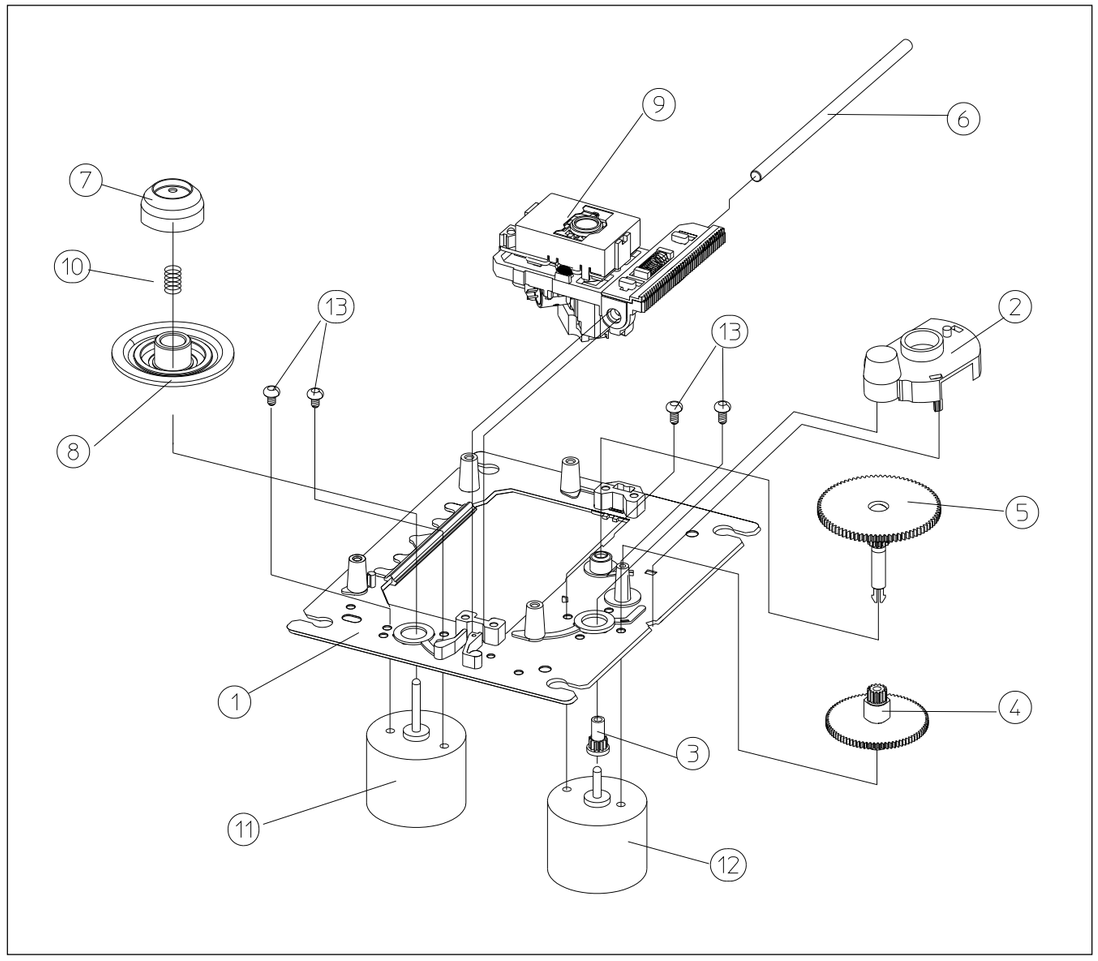
7-3-1 CD MECHA Exploded View



7-4 CD DECK ASS'Y Parts List

No.	New Code No.	Description	Specification	Old Code No.
	CMSP30NM6	DECK -CD	BASIC	
1	AH61-10022C	CHASSIS-DECK(M)	CMSA30 POM M90-44	12001-0052-02
2	AH63-30048A	COVER-GEAR	CMS-V30 BLK ABS	13313-0057-00
3	AH66-20016A	GEAR(A)	CMS-V30 M0.3 Z13 SP POM	11474-0017-00
4	AH66-20017A	GEAR(B)	CMS-V30 M0.3 Z13 SP POM	11474-0018-00
5	AH66-20018A	GEAR(C)	CMS-V30 M0.3 Z16/Z90 SP POM	11474-0019-00
6	AH71-50036A	SHAFT-PU	CMS-V30 D3 L79 SUS420J2	11404-0041-00
7	15253-503-011	CENTER-RING	ABS+GS 20% CMS-V10N	15253-503-011
8	AH66-90018A	TURN-TABLE(M)	ABS+GS 20% CMS-V10N	12223-0003-00
9	AJ30-200013B	PICK-UP CDP	P/U SOH-A1 ROW V-P/J	*SOH-AP
10	AH61-60055A	SPRING-T/TABLE	CS STS-W PI0.4 D5.7 L9.3 CMS-V10N	12724-0062-00
11	AH31-10009A	MOTOR-SPINDLE	RF-310T-11400 43L 25V 85mA	16829-0004-00
12	AH31-10002B	MOTOR-FEED	RF-310TA 30MM NDM4RA3ETL 11.0MM	14769-057-250
13	AH60-10014A	SCREW-PH(+M2*3)	+M2X3 FE FZY W700	17008-120-032

7-4-1 CD DECK Exploded View



8. Electrical Parts List

Loc No.	New Code No	Description	Specification	Old Code No.
	AH90-10638C	**ASSY-PCB MAIN;MAX630,CHN**		
LD1L,1R,2L,2R,3L,3R,4,5,6 AD3,4,CD1,2,3 MD1,2,3,4,5,6,KD1,3,AD1 JD1,2,5,RD10,14,15,17,18 AD2,JD6	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
JD3,4,RD3,5,13,16 RD6,7,11,12,20	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
RD4	0402-000151	DIODE-RECTIFIER;1N5392,100V,1.5A,DO		12169-201-140
RD9	0402-000157	DIODE-RECTIFIER;1N5402,200V,3A,DO-2		12169-209-260
RD1,2	0402-000450	DIODE-BRIDGE;PBL403,200V,4.0A,DIP-4		12169-219-330
DJZD2	0403-000342	DIODE-ZENER;UZ3.6BSA,3.6V,3.47-3.68		12169-404-770
FZD1	0403-000372	DIODE-ZENER;UZ9.1BM,9.1V,8.5-9.6V,5		12169-403-320
RZD3	0403-000380	DIODE-ZENER;UZP13B,13V,12.4-14.1V,1		12169-403-740
RZD1	0403-000382	DIODE-ZENER;UZP15B,15V,13.9-15.6V,1		12169-403-920
RZD4	0403-000384	DIODE-ZENER;UZP20B,20V,18.9-21.1V,1		12169-403-930
MZD1,RZD6	0403-000394	DIODE-ZENER;UZP5.6B,5.6V,5.2-6.0V,1		12169-404-110
RZD2,5	0403-000396	DIODE-ZENER;UZP6.8B,6.8V,6.4-7.2V,1		12169-404-100
MZD2,DJZD1	0403-000398	DIODE-ZENER;UZP8.2B,8.2V,7.7-8.7V,1		12169-403-600
SZD1,2	0403-000399	DIODE-ZENER;UZP9.1B,9.1V,8.5-9.6V,1		12169-403-340
RQ11,2,6	0501-000010	TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,6		12149-301-050
HQ2,5,RQ13	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,-80V,-		12149-101-560
KQ1,3	0501-000296	TR-SMALL SIGNAL;KSA709,PNP,-160V,-1		12149-101-570
AQ2,3	0501-000331	TR-SMALL SIGNAL;KSC1009,NPN,160V,14		12139-301-310
LQ4,5,RQ7,10,DJQ3	0501-000369	TR-SMALL SIGNAL;KSC2331,NPN,80V,60V		12149-301-910
HQ1,3	0501-000392	TR-SMALL SIGNAL;KSC838,NPN,35V,30V,		12149-301-860
CQ7,KQ2,HQ4,6,7 RQ12,14,LQ3,MQ1 FQ2	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,60V,50V,		12149-301-900
DQ2L,2R,AQ1L,1R	0501-000407	TR-SMALL SIGNAL;KSD471A,NPN,40V,30V		12149-401-150
CQ1,3,5	0501-000610	TR-SMALL SIGNAL;KSA928A,PNP,-30V,-3		
RQ1,FQ1	0502-000241	TR-POWER;KSA614,PNP,-80V,-55V,-3A,2		12139-103-560
RQ4	0502-000424	TR-POWER;2SB1566-F,PNP,-60V,-50V,-3		B4052-0086
RQ3	0502-000425	TR-POWER;2SD2395-F,NPN,60V,50V,3A,2		B4052-0087
CQ2,4,6,8	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22		12159-301-780
LQ1L,1R,DQ3,4,OQ1L,1R	0504-000122	TR-DIGITAL;KSR1009,NPN,300MW,4.7K,T		12159-301-790
SQ1	0504-000146	TR-DIGITAL;KSR2004,PNP,300MW,47K-47		12159-301-760
DJQ1,2,SQ2,3	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47		
LQ2,DQ5,KQ4,OQ2	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22		
DQ1L,1R	0505-000197	FET-SILICON;2SK373Y,N,-,-,-,400MW,T		B4054-0023
SIC2	1001-000111	IC-ANALOG SWITCH;GD4066B,BILATERAL		
BIC3,FIC2,4,HIC1,QIC1 SIC3	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,1		12119-401-300
AIC1	1201-000340	IC-POWER AMP;4191,SIP,18P,-,DUAL,-,		12119-205-050
JIC1	1201-000364	IC-PREAMP;3442A,QFP,56P,-,DUAL,-,PL		B4012-0417
SIC1	1201-000463	IC-OP AMP;074,SOP,14P,196MIL,SINGLE		
RIC2	1203-000110	IC-NEGA.FIXED REG.;7912,TO-220,3P,-		12109-401-700
RIC8	1203-000242	IC-POSI.FIXED REG.;7812,TO-220,3P,-		12109-401-690
RIC1	1203-000276	IC-POSI.FIXED REG.;7805,TO-220,3P,-		12119-601-770
RIC6	1203-000282	IC-POSI.FIXED REG.;7806,TO-220,3P,-		12119-601-830
RIC7	1203-000294	IC-POSI.FIXED REG.;7808,TO-220,3P,-		12109-401-730

Loc No.	New Code No.	Description	Specification	Old Code No.
DIC1	1204-000134	IC-DNR PROCESSOR;KA2271B,DIP,16P,-,		12109-323-990
FIC1	1204-000235	IC-VOLUME CONTROL;TDA7318,SOP,28P,-		B4008-1199
FIC5	1204-001028	IC-VOLUME CONTROL;LC7536,DIP,30P,27		
RR9-1,36-1	13954-100-310	CERAMIC-PIPE;PI1.4 15MM WHT		
RR9-1,36-1	13954-500-210	CERAMIC-PIPE;PI1.4 7MM		
THERMISTOR	1404-000172	THERMISTOR-NTC;100OHM,-,-,-,BK		
DR57	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3		11018-877-391
DR19	2001-000027	R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6		11018-277-101
AR12	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.		11018-377-101
RR31,11	2001-000066	R-CARBON(S);10KOHM,5%,1/2W,AA,TP,2.		11018-377-103
RR20	2001-000068	R-CARBON;12KOHM,5%,1/4W,AA,TP,2.4X6		11018-277-123
RR23,28	2001-000071	R-CARBON;22KOHM,5%,1/4W,AA,TP,2.4X6		11018-277-223
DR61	2001-000109	R-CARBON(S);470OHM,5%,1/2W,AA,TP,2.		11018-377-471
FR3	2001-000111	R-CARBON;150OHM,5%,1/4W,AA,TP,2.4X6		11018-277-151
RR3,4	2001-000117	R-CARBON(S);68OHM,5%,1/2W,AA,TP,2.4		11018-377-680
DR24L,24R	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-122
AR8,10,DR35	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3		11018-877-101
DR34,37,RR35	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
MR17	2001-000302	R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-100
MR11,DR20	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-123
MR43L,43R,RR29	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-183
AR1L,1R,2R,BR8L,8R,MR25 JR5L,5R,SR44R	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
MR15,RR7,8,32 FR4	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
RR39	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
AR3R	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3		11018-877-221
RR21,24,30,37,DR40R FR1	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
FR6	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
DR12	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
MR21	2001-000812	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X		11018-877-562
QR5R	2001-000864	R-CARBON;56KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-563
FR2	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X		11018-877-682
SR16	2001-001000	R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-823
AR5,6,RR19	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4		11018-377-102
RR14	2001-001093	R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2		11018-377-222
DR56	2001-001096	R-CARBON(S);2.2OHM,5%,1/2W,AA,TP,2.		11018-377-229
JR11	2001-001140	R-CARBON(S);39OHM,5%,1/2W,AA,TP,2.4		11018-377-390
DR48	2001-001178	R-CARBON(S);680OHM,5%,1/2W,AA,TP,2.		11018-377-681
SR41,42	2001-001195	R-CARBON(S);82OHM,5%,1/2W,AA,TP,2.4		11018-377-820
RR36	2003-000471	R-METAL OXIDE(S);10OHM,5%,2W,AA,TP,		11048-577-100
MR33	2003-000522	R-METAL OXIDE(S);180OHM,5%,1W,AA,TP		11048-477-181
RR2,9	2003-000593	R-METAL OXIDE(S);22OHM,5%,3W,AA,TP,		11048-677-220
AR13L,13R	2003-000690	R-METAL OXIDE(S);4.7OHM,5%,2W,AA,TP		11048-577-479
RR1	2003-000701	R-METAL OXIDE(S);470OHM,5%,2W,AA,TP		11048-577-471
MR29	2003-000708	R-METAL OXIDE(S);47OHM,5%,1W,AA,TP,		11048-477-470
RR12,FR5	2003-000710	R-METAL OXIDE(S);47OHM,5%,2W,AA,TP,		11048-577-470
RR6	2003-000800	R-METAL OXIDE(S);820OHM,5%,2W,AA,TP		11048-577-821
SR7L,10	2007-000001	R-CHIP;68KOHM,5%,1/10W,DA,TP,2012		11119-101-683
J10,11,12,13,14,16,17,18,19 J20,21,22,23,24,25,26,27,28,29 J31,33,34,35,36,37,38,39	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000

Loc No.	New Code No.	Description	Specification	Old Code No.
J40,41,42,43,44,45,46				
DR33L,33R,JR10				
J47				
SR13L,31L	2007-000030	R-CHIP;560OHM,5%,1/10W,DA,TP,2012		11119-101-561
SR14,RR34,DR32L,32R	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012		11119-101-152
DR1L,1R,26,42,43,44,50	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
DR36,51,52,DR71L,71R,MR32				
SR17,22,40L,40R				
DR18,BR6,JR9,AR14,MR4	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012		11119-101-101
BR7L,7R,DR13,27,45,54,55,59	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
MR14,16,36,37,SR28,29,34,35				
DR60,62,39				
MR9	2007-000308	R-CHIP;10OHM,5%,1/10W,DA,TP,2012		11119-101-100
SR15,21	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012		11119-101-124
DR9L,9R	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
AR7,15,DR10L,10R,23	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012		11119-101-153
XR2L,2R				
MR48,SR12	2007-000457	R-CHIP;18KOHM,5%,1/10W,DA,TP,2012		11119-101-183
FR1L,1R,DR11L,11R,16,	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
MR6,31				
AR2L,DR58,KR1,QR1L				
SR44L,RR41,42				
DJR2,DR4L,4R,JR7L,7R	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012		11119-101-222
MR50,RR43,22				
BR9L,9R,SR5L,5R				
DR7	2007-000498	R-CHIP;2.2MOHM,5%,1/10W,DA,TP,2012		11119-101-225
MR5,SR13R,31R	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012		11119-101-272
BR10L,10R				
MR10,46,SR32,33,AR3L	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012		11119-101-221
AR3R				
DJR1,JR8L,8R,KR2,5,RR5	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
MR12,13,20,47,SR3L,3R,18,23				
SR27,30L,30R,DR40L,RR13,18				
AR5L,5R				
RR10,BR11				
MR27	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012		11119-101-220
SR26,39L,39R,RR38	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012		11119-101-273
DR70,MR45,28,SR2L,2R	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332
CR1L,1R,DR46,47,DSR6	2007-000710	R-CHIP;3.9KOHM,5%,1/10W,DA,TP,2012		11119-101-392
MR26,44L,44R,RR26,SR25				
MR49	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012		11119-101-331
DR31L,31R,XR1L,1R,DR17	2007-000774	R-CHIP;33KOHM,5%,1/10W,DA,TP,2012		11119-101-333
SR6L,6R,7R,8,9,11				
MR8	2007-000822	R-CHIP;390OHM,5%,1/10W,DA,TP,2012		11119-101-391
DR28	2007-000830	R-CHIP;39KOHM,5%,1/10W,DA,TP,2012		11119-101-393
MR1,2,19,23,24,38,39,40,41	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
BR14,25,29,KR3,RR17,33	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
FR4L,4R,QR3L,3R,4L,4R				
QR2L,2R,JR11L,11R	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
JR1L,1R,2L,2R,6L,6R				
SR1L,1R,19,24,36,43				
SR1L,1R,19,24,36,43				
DR6L,6R,5L,5R,30L,30R,8,38	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012		11119-101-562

Loc No.	New Code No.	Description	Specification	Old Code No.
DR41L,41R,CR2L,2R,3L,3R				
KR4,6,RR25,FR2L,2R,MR18				
AR4L,4R,9L,9R,DR15,QR5L	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012		11119-101-563
DR7L,7R,21,22	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012		11119-101-682
RR16,27,MR34				
AR11L,11R,DR49,53	2007-001118	R-CHIP;680OHM,5%,1/10W,DA,TP,2012		11119-101-681
MR30,SR31R				
DR2L,2R	2007-001201	R-CHIP;820OHM,5%,1/10W,DA,TP,2012		11119-101-821
SR20	2007-001208	R-CHIP;82KOHM,5%,1/10W,DA,TP,2012		11119-101-823
DR3L,3R	2007-001213	R-CHIP;82OHM,1%,1/10W,DA,TP,2012		11119-102-820
MSR1	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP		11249-102-034
DSR1L,1R	2103-000248	VR-SEMI;200KOHM,30%,1/10W,TOP		11249-102-094
DSR3L,4L	2103-000290	VR-SEMI;20KOHM,30%,1/10W,TOP		11249-102-044
DSR5	2103-000341	VR-SEMI;2KOHM,30%,1/10W,TOP		11249-102-104
DSR2L	2103-000461	VR-SEMI;50KOHM,30%,1/10W,TOP		11249-102-064
LC1L,1R,MC42	2201-000368	C-CERAMIC,DISC;220PF,10%,50V,SL,6.5		11407-018-221
RC1,3	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC		11469-501-070
AC13L,13R	2201-000565	C-CERAMIC,DISC;47NF,20%,50V,Y5V,12.		11417-344-473
MC27	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P		11449-518-102
MC6	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
MC11	2202-000819	C-CERAMIC,MLC-AXIAL;47NF,+80-20%,50		11449-010-473
FC2L,2R,3L,3R,JC11	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5		
MC33,34,35,24,XC1L,1R	2203-000239	C-CERAMIC,CHIP;100PF,5%,50V,NPO,201		11129-009-101
SC2L,2R				
DC39L,39R	2203-000323	C-CERAMIC,CHIP;12NF,10%,50V,X7R,201		11129-004-123
LC4	2203-000374	C-CERAMIC,CHIP;15NF,10%,50V,X7R,201		11129-004-153
MC30	2203-000391	C-CERAMIC,CHIP;15PF,5%,50V,NPO,3216		11129-008-150
MC26	2203-000408	C-CERAMIC,CHIP;180PF,5%,50V,NPO,201		11129-008-181
MC14	2203-000417	C-CERAMIC,CHIP;18NF,10%,50V,X7R,201		11129-004-183
MC3	2203-000429	C-CERAMIC,CHIP;18PF,5%,50V,NPO,2012		11129-008-180
LC5	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20		11129-004-222
FC11,12	2203-000533	C-CERAMIC,CHIP;2.7NF,10%,50V,X7R,20		11129-004-272
DC7L,7R,23,19,MC1,5,6	2203-000609	C-CERAMIC,CHIP;22NF,10%,50V,X7R,201		11129-004-223
MC36				
MC36				
DC1L,1R	2203-000648	C-CERAMIC,CHIP;24PF,5%,50V,NPO,2012		11129-009-240
MC43	2203-000671	C-CERAMIC,CHIP;27NF,10%,50V,X7R,201		11129-001-273
DC46L,46R,MC47L,47R	2203-000716	C-CERAMIC,CHIP;3.3NF,10%,50V,X7R,20		11129-004-332
MC16L,16R	2203-000802	C-CERAMIC,CHIP;33NF,10%,50V,X7R,201		11129-001-333
LC6,SC6	2203-000892	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20		
AC3L,3R,DC45L,45R,2L,2R	2203-000953	C-CERAMIC,CHIP;470PF,5%,50V,NPO,201		11129-004-471
MC2,8,10,22,JC10L,10R,	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,201		
MFC1				
LC10L,10R	2203-001223	C-CERAMIC,CHIP;820PF,10%,50V,X7R,20		A1100-0023
DC15,40L,40R,41,43,44,	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012		
MC32,CC4				
MC15				
DC47L,47R	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,20		
DC18	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20		
MC29	2203-001619	C-CERAMIC,CHIP;27PF,5%,50V,NPO,2012		
LC2	2301-000364	C-FILM,PEF;1.5NF,10%,50V,5.5X12X3,3		11505-714-152
AC12L,12R	2303-000312	C-FILM,PPF;100NF,1%,50V,7.5*12.5*3.		A1102-0164

Loc No.	New Code No.	Description	Specification	Old Code No.
RC7	2401-000230	C-AL;100UF,20%,100V,GP,10X20MM,5MM,		11608-108-104
DC33,JC9L,9R,MC31	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
RC12,CC1	2401-000303	C-AL;100UF,20%,25V,GP,6.3*11,2.5MM,		11608-104-104
DC20,22,34,MC7,9,23,LC9	2401-000415	C-AL;10UF,20%,16V,GP,5*11,2MM,		11608-103-103
QC1L,1R,FC4L,4R,MC12				
LC8	2401-000438	C-AL;10UF,20%,25V,GP,5*11,2MM,		11608-104-103
AC7,8,9,RC29	2401-000475	C-AL;10UF,20%,50V,GP,5*11,2MM,		11608-106-100
MC40	2401-000795	C-AL;220UF,20%,16V,GP,8X11.5,3.5MM,		
RC8	2401-000847	C-AL;220UF,20%,35V,GP,10X12MM,5MM,T		11608-105-221
RC13,FC1	2401-000871	C-AL;220UF,20%,50V,GP,10X16MM,5MM,		11609-402-300
FC14	2401-000907	C-AL;22UF,20%,16V,GP,5*11,2MM,		11608-103-223
RC28,16,AC2L,2R,MC28	2401-001022	C-AL;3.3UF,20%,50V,GP,5*11,2MM,		11608-106-332
JC12	2401-001164	C-AL;33UF,20%,16V,GP,5*11,2MM,		11608-103-333
JC13	2401-001364	C-AL;470UF,20%,16V,GP,10X12MM,5MM,T		11608-103-471
RC14				
RC2	2401-001413	C-AL;470UF,20%,35V,GP,10X20,5MM,		11609-402-130
DC6L,6R,25,RC25,27	2401-001465	C-AL;47UF,20%,10V,GP,5*11,2MM,		11608-102-473
FC13	2401-001538	C-AL;47UF,20%,25V,GP,6.3X11,2.5MM,		
AC4L,4R	2401-001572	C-AL;47UF,20%,50V,GP,6.3*11,2.5MM,		11608-106-470
DC36L,36R	2401-001645	C-AL;680NF,20%,50V,GP,5*11,2MM,		11608-106-688
SC5L,5R	2401-001889	C-AL;100NF,20%,50V,GP,5X11MM,2MM,BK		
DC16,12,17	2401-001895	C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M		
DC13,RC24,MC18L,18R	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
MC17,20,25,RC9	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
JC8				
RC11	2401-001928	C-AL;2200UF,20%,35V,GP,16X31MM,7.5M		11607-105-222
RC10	2401-001942	C-AL;3300UF,20%,35V,GP,18X37MM,7.5M		11607-105-332
MC19L,19R,JC2L,2R,RC23	2401-001954	C-AL;4.7UF,20%,50V,GP,6.3X11MM,2.5M		
DC11L,11R,JC7L,7R,5L,5R,				
JC4L,4R,SC3L,3R,8L,8R,RC17				
OC1				
KC1,SC7,MC21	2401-001968	C-AL;470NF,20%,50V,GP,5X11MM,2MM,BK		
LC3,7,MC4,13,DC32	2401-001975	C-AL;47UF,20%,16V,GP,5X11MM,2MM,BK		
RC15,SC9,10				
AC6	2401-001994	C-AL;3.3UF,20%,50V,BP,5*11MM,5MM,TP		11608-206-339
RC6	2401-002168	C-AL;100UF,0.2,50V,GP,10X12.5,5MM,T		
AC5				
AC10				
FC5L,5R,DC21L,21R,26L,26R	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
FC26R,6L,6R,7L,7R,8L,8R,				
FC9L,9R,FC1L,1R				
DC31L,31R,30L,30R,9L,9R,38R				
DC10L,10R,14,35L,35R,38L				
RC4,5	2401-002258	C-AL;4700UF,20%,50V,GP,22X40MM,5MM,		
CL1,JL2L,2R,1	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM		12429-411-100
LL1	2701-000298	INDUCTOR-AXIAL;470UH,10%,4.2X9.8MM		12429-070-130
MX1	2801-000734	CRYSTAL-UNIT;7.2MHZ,50PPM,28-AAM,12		14539-501-140
HX1	2802-000215	RESONATOR-CERAMIC;19KHZ,+-38HZ,-,7.		14539-504-100
IFT1,3	2903-000105	FILTER-CERAMIC;BP,10.7MHZ+-25KHZ		14529-301-753
IFT5	2903-000148	FILTER-CERAMIC;BP,450KHZ+-1KHZ		A1243-0049
DLPF2L,2R	2909-000210	FILTER-LC;LP,-,1DB,30DB/19KHZ,50DB/		14529-414-050
P/B DECK	3708-000446	CONNECTOR-FPC/FC/PIC;11P,1.5MM,STRA		B6010-1547

Loc No.	New Code No.	Description	Specification	Old Code No.
R/P DECK	3708-000447	CONNECTOR-FPC/FC/PIC;13P,1.5MM,STRA		B6010-0399
CCW1,2	3710-000541	CONNECTOR-SOCKET;20P,-,1.25MM,STRAI		
FCW3	3711-000820	CONNECTOR-HEADER;BOX,2P,1R,2.5MM,ST		13349-512-561
TP1,2,3,P/B HEAD	3711-000903	CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST		13349-527-502
R/P HEAD	3711-001011	CONNECTOR-HEADER;BOX,5P,1R,2.5MM,ST		13349-103-053
MJ1	3716-000201	TERMINAL-BLOCK;NON SOLDER,4P,4MM,-,		A3059-0006
AJ1	3716-000204	TERMINAL-BLOCK;NON SOLDER,4P,11MM,-		A3059-0017
D/JACK1,2	3722-000342	JACK-DC POWER;2P,-,#16~22,NI		13333-501-410
HJK1	3722-000363	JACK-PHONE;9P,6.4MM,-,AG		A3040-0115
AUX JACK	3722-000377	JACK-RCA;4P/2C,3.5MM,#16~22,SN		A3040-0218
RIC6 BACK	3811-000130	WIRE-PVC CU;BCWA,300V,60MM,7/0.16MM		13049-011-106
AIC1	6003-000279	SCREW-TAPTITE;BH,+,B,M3,L20,ZPC(YEL		17448-130-201
RQ1,3,RIC1,2,6,7,8,AIC1	6003-000283	SCREW-TAPTITE;BH,+,B,M3,L8,ZPC(YEL)		117458-130-081
FIC9	AH14-10003E	IC;KIA7812PI,-,TO-220		
FIC3	AH14-10004L	IC;NJU3718,SOP,BULK		
FIC6	AH14-10006F	IC;TC9173P,DIP,EXPANDER 16P		
MIC2	AH14-10007G	IC;LC72131,DIP,STICK PLL		
MIC1	AH14-10007H	IC;LA1836,DIP,STICK IF+MPX		
MLPF1L,1R	AH26-10001A	TRANS-IF;FV-AD-BASE19K/38K,LOW PASS		12450-304-040
IFT4	AH26-10001E	TRANS-IF;KS940228-09,-,-,7.6X12.0,-		12619-030-005
DLPF3L,3R,1L,1R	AH26-10002X	COIL-TRAP;KS940830-05,BIAS-TRAP,30D		12429-206-102
LL3	AH26-10003C	COIL-TRAP;PCHNS-5371EQJ,BIAS-TRAP,-		12619-577-771
IFT6	AH26-10020A	TRANS-DET;-,7KLL,DET,-,7.8mm,91pF,1		
MC01	AH27-80060A	COIL-OSC;RBW07VB,345UH,AM+RF		
AL1L,1R	AH27-90001A	COIL-SPRING;,2.2UH,-,-,SPRING		12429-060-030
FCW2	AH39-20008M	LEAD-CONNECTOR ASS'Y;5264,5395,2P,1		13078-472-115
R/P HEAD	AH39-20019C	LEAD-CONNECTOR ASS'Y;EHR,5264,5P,35		16439-0115-00
FCW5	AH39-20019M	LEAD-CONNECTOR ASS'Y;5051,5395,3P,2		16439-0124-00
RCW1	AH39-20514A	LEAD CONNECTOR-ASSY;-,5264,51088,10		
P/B DECK	AH39-20517A	LEAD CONNECTOR-ASSY;-,5264,EHR-03,3		
TO CHASSIS ANT	AH39-50001H	LEAD-FASTEN;RING,1007#24,100MM,BLK		13059-201-103
TO CHASSIS H/P	AH39-50001N	LEAD-FASTEN;RING,1007#24,250MM,BLK		13059-202-253
FEP	AH40-10025A	TUNER-FM;FTA4-551H,3G,75OHM		
MAIN PCB	AH41-10401A	PCB-MAIN;MAX630,1L,PHENOL,330X247X1		
RIC2,RQ1	AH62-30060A	HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-70		15684-505-820
RIC1	AH62-30061B	HEAT SINK;SCM6500,AL,-,ANODIZING,BL		15684-507-530
RQ3	AH62-30064D	HEAT SINK;DAT7000,AL,-,ANODIZING,BL		15684-509-730
AIC1	AH62-30105A	HEAT SINK-M;-,AL,-,T6.0,-,WHT,-,MAX		

AH90-40329C ASSY-OPT PCB MAIN;MAX630TCE,-

CCDW2	3711-001137	CONNECTOR-HEADER;BOX,8P,1R,2MM,STRA		13349-119-080

AH90-10639C ASSY-PCB FRONT;MAX630,CHN

UD1,3,4,5,6,7,8,9,10	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
UD11,13				
UD20,21				
UD2,22	0402-000125	DIODE-RECTIFIER;1N4001,50V,1A,DO-41		A4104-0001
UD12	0402-000151	DIODE-RECTIFIER;1N5392,100V,1.5A,DO		12169-201-140
UQ5,7,10,8	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,60V,50V,		12149-301-900
UQ1,2,3,4,6,11,12	0504-000122	TR-DIGITAL;KSR1009,NPN,300MW,4.7K,T		12159-301-790
ULD3,4,5,18,19,20,21,22	0601-000141	LED;ROUND,GRN,3.1MM,555NM		A4150-0290
ULD23,24,30				
ULD23,24,30				

Loc No.	New Code No.	Description	Specification	Old Code No.
ULD7,6,9,10,12,13,15,16	0601-000141	LED;ROUND,GRN,3.1MM,555NM		A4150-0290
ULD1,2,8,11,14,17,29	0601-000180	LED;INVERTER,ORG,3MM,610NM		12309-001-210
ULD26,27				
ULD25,28	0601-000245	LED;ROUND,RED,3.1MM,650NM		12309-001-450
UIC4	1204-000156	IC-EQUALIZER;BA3834S,DIP,18P,-,PLAS		B4012-0447
UR53	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
UR107,108,109,110,113,143	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
UR23	2001-000302	R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-100
UR104,130,131,57	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
UR17	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X		11018-877-332
	2001-000666	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-330
UR100,101,132	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
UR76	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-470
UR74	2001-001006	R-CARBON;82OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-820
UR13,14,15,68	2007-000023	R-CHIP;120OHM,5%,1/10W,DA,TP,2012		11119-201-121
JW1,2,3,4,6,7,8,9,10	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
JW5,15,16,17,18				
UR6,7,29,30,40,41,51,52	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012		11119-101-122
UR8,31,42	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012		11119-101-152
UR22,96,97,98	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
UR69,71,72	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012		11119-101-101
UR55,56,95,129,135,136,137	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
UR138,139,140,141,142,				
UR114,115				
UR4	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
UR75,61,63,65,67,70	2007-000401	R-CHIP;150OHM,5%,1/10W,DA,TP,2012		11119-101-151
UR77,78				
UR11,12	2007-000449	R-CHIP;180OHM,5%,1/10W,DA,TP,2012		11119-101-181
UR21	2007-000457	R-CHIP;18KOHM,5%,1/10W,DA,TP,2012		11119-101-183
UR24,26,28,37,39,48,50	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
UR5,111,99				
UR32,43,9,124,125,126	2007-000493	R-CHIP;2.2KOHM,5%,1/10W,DA,TP,2012		11119-101-222
UR127,128,20,JW5				
UR127,128,20,JW5				
UR10,16,33,44	2007-000518	R-CHIP;2.7KOHM,5%,1/10W,DA,TP,2012		11119-101-272
UR105	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012		11119-101-224
UR106	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012		11119-101-221
UR121	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
UR1,34,45	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332
UR62	2007-000781	R-CHIP;33OHM,5%,1/10W,DA,TP,2012		A1020-0083
UR2,18,35,46,79,80,81,82	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
UR83,84,85,86,87,88,89				
UR90,91,92,93,94				
UR134,103,58				
UR3,19,36,47	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012		11119-101-682
UR25,27,38,49	2007-001201	R-CHIP;820OHM,5%,1/10W,DA,TP,2012		11119-101-821
UC25,26	2201-000223	C-CERAMIC,DISC;12PF,5%,50V,NPO,5.0*		11407-057-120
UC13,14	2201-000423	C-CERAMIC,DISC;27PF,5%,50V,NPO,5.0*		11407-057-270
UC1,2,3,4	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5		
UC8	2203-000661	C-CERAMIC,CHIP;270PF,5%,50V,NPO,201		11129-015-271
UC6,7,9,10	2203-000953	C-CERAMIC,CHIP;470PF,5%,50V,NPO,201		11129-004-471
UC17,23,21	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,201		
UC18	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
UC5,22	2401-000243	C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T		11608-152-101

Loc No.	New Code No.	Description	Specification	Old Code No.
UC16,27,28,29	2401-000650	C-AL;2.2UF,20%,50V,GP,3*5,1MM,TP		11608-156-229
UC12	2401-000752	C-AL;220NF,20%,50V,GP,3*5,1MM,TP		11608-106-228
UC19	2409-000123	C-EDL;47000UF,4UA,5.5V,-,-,5MM,BK		B1104-0540
UX1	2801-001382	CRYSTAL-UNIT;12MHZ,50PPM,28-AAM,10P		A1280-0017
UX2	2801-001394	CRYSTAL-UNIT;32.768KHZ,20PPM,28-AAY		14539-502-350
USW1,2,3,4,5,6,7,8	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X		13559-901-100
USW9,10,11,12,13,14,15,16				
USW17,18,19,20,21,22,23,24				
USW25,26,27,28,29,30,31				
USW32,33,34,35,36,37,38				
USW39,40,41,42,43,44,45				
USW46,47,48,49				
MAIN VR,MAGIC JOG	3406-000162	SWITCH-ROTARY;5V,50MA,SPDT,20MM		A3012-0018
CCD2	3708-000307	CONNECTOR-FPC/FC/PIC;7P,1.25MM,ANGL		B6010-0810
CCD4	3708-000448	CONNECTOR-FPC/FC/PIC;6P,1.25MM,STRA		B6010-1610
CCD1	3708-000449	CONNECTOR-FPC/FC/PIC;7P,1.25MM,STRA		B6010-1104
CCD3	3708-000454	CONNECTOR-FPC/FC/PIC;22P,1.25MM,STR		B6010-1500
CCD5	3708-001027	CONNECTOR-FPC/FC/PIC;6P,1.25MM,ANGL		
CCDW1,2	3711-002581	CONNECTOR-HEADER;WALL,20P,1R,1.5MM,		
CCW1-2	3809-000180	CABLE-FLAT;30V,80C,250MM,7P,1.25MM,		16489-0010-00
CCD4-5	3809-000199	CABLE-FLAT;30V,80C,300MM,6P,1.25MM,		B6032-0072
AIC1	6003-000279	SCREW-TAPTITE;BH,+,B,M3,L20,ZPC(YEL		17448-130-201
VFD	AH07-20002N	V.F.DISPLAY;SVA-16MM04,-,-,NAX630		A4153-0114
UIC1	AH11-10002F	IC-MASK ROM;LC86P6232,-,DIP		B4000-0017
UIC2	AH14-10004L	IC;NJU3718,SOP,BULK		
UIC3	AH14-10007C	IC;NJU3711M,SOP,STICK EXPANDER 8BIT		
REAR	AH31-10020A	FAN-DC;D0620B-12M,12VDC/0.16A,		A3070-0112
JW139UP	AH39-50001M	LEAD-FASTEN;RING,1007#24,350MM,BLK		13059-201-353
REMOCON EYE	AH59-60001J	MODULE-REMOCON;GP1U271R,38KHZ,-,MES		B1294-0043
FLT	AH61-20079A	HOLDER-VFD;ABS,94HB,BLK,-,MAX-380,		13322-0145-00

AH90-40330C ASSY-OPT PCB FRONT;MAX630CHN,120E

UD15,17,18,21	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5	
UD15,17,18	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5	

AH90-10657B ASSY-PCB POWER;MAX630,CHN
AH90-40341B ASSY-OPT PCB POWER;MAX630,CHN

UD22	0402-000125	DIODE-RECTIFIER; 1N4001,50V,1A,DO-41	62169-201-050
PC1,2	2201-000520	C-CERAMIC,DISC ; 4.7NF, +80-20%,400VAC	11469-501-070
RF2-1	3601-000170	FUSE-FERRULE ; 250V, 1.6A,TIME LAG.GLA	14709-241-070
RF3-1,4-1	3601-000248	FUSE-FERRULE; 250V,2A,TIME LAG,GLASS	14709-241-250
RF2,3,4	3602-000147	FUSE-CLIP ; 250V,7.5A 30MOHM	13164-101-913
PW1	3711-000190	CONNECTOR-HEADER ; 1WALL, 2P, 1R,7.932MM	13349-156-020
PCW1	3711-000588	CONNECTOR-HEADER ; BOX, 10P, 1R,2.5MM	13349-103-103
FCW1	3711-000820	CONNECTOR-HEADER ; BOX, 2P, 1R,2.5MM	63349-062-310
PL1,2	AH27-10001F	COIL-CHOKE ; 27UH, K,Q30,-,-,DR	12429-010-330

Loc No.	New Code No.	Description	Specification	Old Code No.
G3A8-3VI/C		**ASSY CD PACK;G3A8**		
AH90-10346M		**ASSY-PCB CD MAIN;G3A8,CKD**		
ND200,201,202,203	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
NZD101	0403-000361	DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24		12169-404-800
NQ1502	0501-000323	TR-SMALL SIGNAL;KSB564Y,PNP,800MW,T		12149-202-050
NQ1501	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO		
NIC9282	0904-000157	IC-DSP;9282,-,QFP,80P,-,16.9344MHZ,		A4012-0291
NIC9258	1003-000179	IC-MOTOR DRIVER;KA9258D,SOP,28P,-,S		
NIC9270	1204-000110	IC-AUDIO FILTER;KA9270,SOP,20P,-,PL		A4012-0089
NIC9220	1204-001041	IC-ASP;KA9220B,QFP,80P,-,PLASTIC,6V		
NR605	2007-000001	R-CHIP;68KOHM,5%,1/10W,DA,TP,2012		11119-101-683
NR606,611,608,609,610	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
NR47L,47R,104,203,NRD	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
NR106,107	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012		11119-101-124
NR41L,41R,204,191,100	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
NR190				
NR103,119	2007-000395	R-CHIP;150KOHM,5%,1/10W,DA,TP,2012		11119-101-154
NR110	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012		11119-101-153
NR115	2007-000444	R-CHIP;180KOHM,5%,1/10W,DA,TP,2012		11119-101-184
NR102,109,205,45L,45R	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
NR42L,42R,114	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012		11119-101-105
NR40L,40R	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
NR101	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012		11119-101-220
NR43L,43R,200	2007-000653	R-CHIP;27KOHM,5%,1/10W,DA,TP,2012		11119-101-273
NR201,202	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332
NR105	2007-000830	R-CHIP;39KOHM,5%,1/10W,DA,TP,2012		11119-101-393
NR44L,44R,46L,46R	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
NR117	2007-000898	R-CHIP;430KOHM,5%,1/10W,DA,TP,2012		11119-101-434
NR111,108	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
NR112	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012		11119-101-563
NR113	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012		11119-101-822
NR116	2007-001195	R-CHIP;820KOHM,5%,1/10W,DA,TP,2012		11119-101-824
NR118	2007-001213	R-CHIP;82OHM,1%,1/10W,DA,TP,2012		11119-102-820
NR555	2008-000141	R-FUSIBLE;2.2OHM,5%,1/4W,AA,TP,2.6X		11058-277-229
NVR1701	2103-000007	VR-SEMI;50KOHM,30%,1/10W,SIDE		11249-102-063
NVR1702,1703,1704	2103-000291	VR-SEMI;20KOHM,30%,1/10W,SIDE		11249-102-043
NC119,120,121,107,108	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5		
NC603				
NC205,110,116,102,103	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,201		11129-004-103
43R,44L,500,600,601,602				
NC1000,1001	2203-000363	C-CERAMIC,CHIP;150PF,5%,50V,NPO,201		
NC112	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20		11129-004-222
NC118	2203-000787	C-CERAMIC,CHIP;330PF,5%,50V,NPO,201		
NC113,125,101	2203-000802	C-CERAMIC,CHIP;33NF,10%,50V,X7R,201		11129-001-333
NC100	2203-000892	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20		
NC204,124	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5		
NC200	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,201		

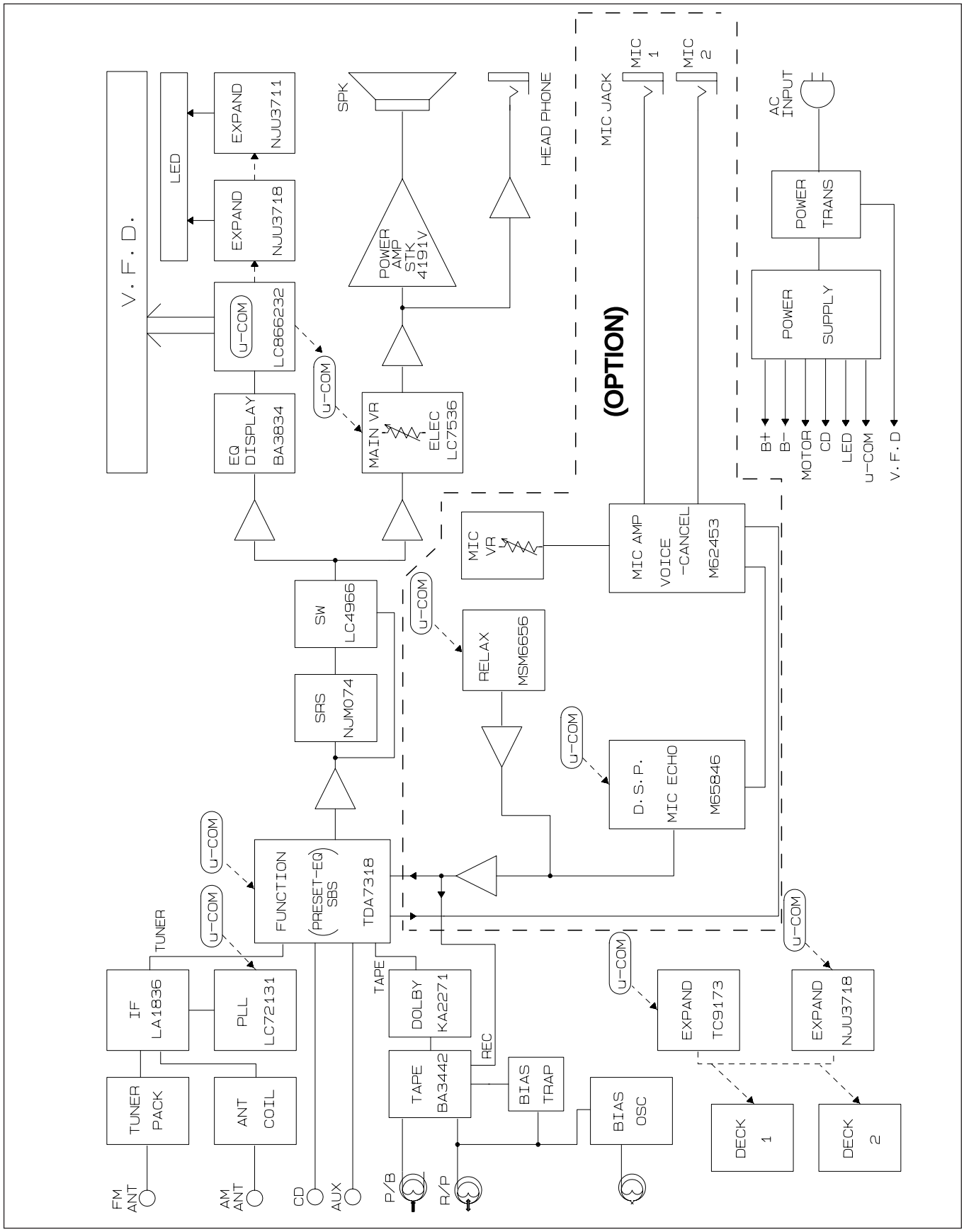
Loc No.	New Code No.	Description	Specification	Old Code No.
NC45R,46L	2203-001058	C-CERAMIC,CHIP;560PF,5%,50V,NPO,201		11129-019-561
NC111	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,20		11129-004-682
NC115	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V		11129-004-683
NC190	2203-001256	C-CERAMIC,CHIP;8PF,0.25PF,50V,NPO,2		
NC109,104,42R,43L	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012		
NC41L,41R	2203-001550	C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,20		
NC201	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20		
NC202,203	2203-001619	C-CERAMIC,CHIP;27PF,5%,50V,NPO,2012		
NC702,105	2401-000243	C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T		11608-152-101
NC114	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
NC703	2401-000778	C-AL;220UF,20%,10V,GP,6.3X11,2.5MM,		11608-102-224
NC700,701	2401-000868	C-AL;220UF,20%,4V,GP,6.3*5,2.5MM,TP		11608-171-221
NC44R,45L,40L,40R,122	2401-001238	C-AL;4.7UF,20%,25V,GP,3*5,1MM,TP		11608-154-479
NC42L	2401-001502	C-AL;47UF,20%,16V,GP,6.3*5,2.5MM,TP		11608-153-470
NC117	2401-001968	C-AL;470NF,20%,50V,GP,5X11MM,5,TP		
NL100	2703-000002	INDUCTOR-SMD;100UH,10%,2.5X3.2X2MM		11176-600-040
NXF100	2802-000211	RESONATOR-CERAMIC;16.93MHZ,0.5%,TP,		14539-503-083
NS100	3409-000174	SWITCH-LEAF;16VDC,500MA,10GF,SPST		13564-601-100
NCW100	3708-000177	CONNECTOR-FPC/FC/PIC;16P,1.0MM,ANGL		A6010-1523
NCW103	3708-000412	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANG		A6010-1526
NCW101	3711-001136	CONNECTOR-HEADER;BOX,8P,1R,2MM,ANGL		13349-139-080
NIC05	AC14-12001G	IC;KA78L05,T,-		
	AH62-30047A	HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555		11124-0061-00

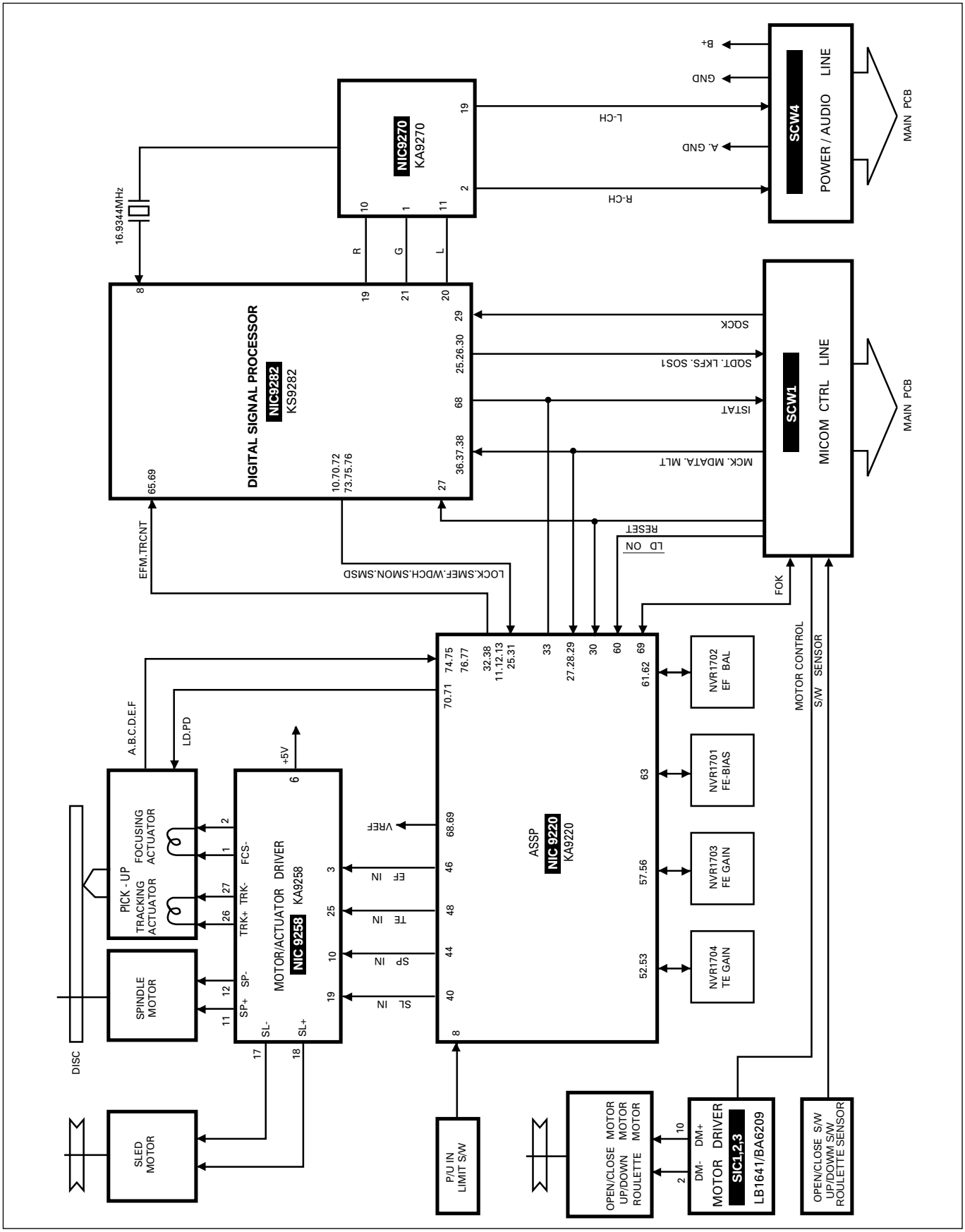
AH90-10719E ASSY-PCB;G3A8-3VI/C,NEW

SZD1	0403-000352	DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,5		12169-403-200
SZD2	0403-000361	DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24		12169-404-800
SIC1,2	1003-000298	IC-MOTOR DRIVER;LB1641,SIP,10P,-,-		
SR4	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.		11018-377-101
SR1,2,5	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
SR3	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
SC5,6,7	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V		11417-344-103
SC1,2,3,4	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5		
SC11	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
SC8,9	2401-000795	C-AL;220UF,20%,16V,GP,8X11.5,3.5MM,		
SC10	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
SL1	2701-000177	INDUCTOR-AXIAL;33UH,10%,2.5X3.4MM		12429-211-330
SCW2	3708-000507	CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANG		
	3708-001131	CONNECTOR-FPC/FC/PIC;5P,1.25MM,STRA		
SCW1	3711-002579	CONNECTOR-HEADER;WALL,22P,1R,2.5MM,		
	3711-003379	CONNECTOR-HEADER;NOWALL,3P,1R,2.5MM		
SIC3	AC14-12001G	IC;KA78L05,T,-		
SCW4	AH39-20025S	LEAD-CONNECTOR,ASSY;-,51004-08,3502		16439-0291-00
SCW3	AH39-20025T	LEAD-CONNECTOR,ASSY;-,51004-08,3502		16439-0292-00
SCW5	3708-001131	CONNECTOR-FPC/FC/P/C;5P,1.25MM STRAIGHT		
SCW6	3711-003379	CONNECTOR-HEADER; NOWALL,3P,1R,2.5MM		

9. Block Diagrams

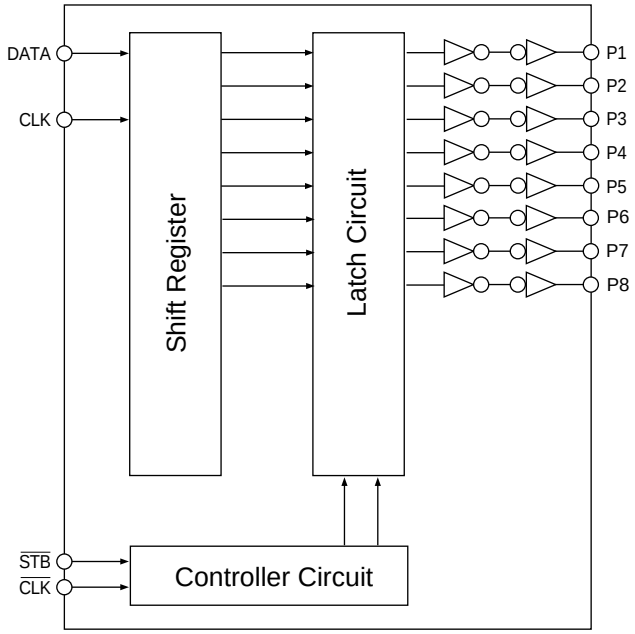
9-1 Main



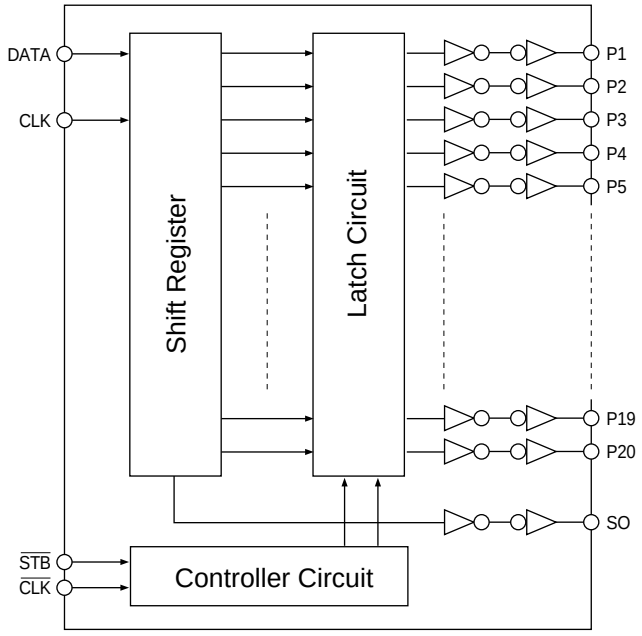

B+
GND
A. GND
L-CH
R-CH
SCW4
POWER / AUDIO LINE
MAIN PCB
NIC9270
KA9270
16.9344MHz
R
G
L
DIGITAL SIGNAL PROCESSOR
NIC9282
KS9282
SOCK
SODT. LKFS. SOS1
ISTAT
MCK. MDATA. MLT
SCW1
MICOM CTRL LINE
MAIN PCB
RESET
LD ON
EFM.TRCNT
LOCK.SMEF.WDCH.SMON.SMSD
FOK
MOTOR CONTROL
S/W SENSOR
A.B.C.D.E.F
LD.PD
+5V
VREF
ASSP
NIC 9220
KA9220
NVR1702
EF BAL
NVR1701
FE-BIAS
NVR1703
FE GAIN
NVR1704
TE GAIN
PICK - UP
TRACKING
ACTUATOR
FOCUSING
ACTUATOR
FCS-
TRK-
TRK+
SP-
SP+
SL-
SL+
MOTOR/ACTUATOR DRIVER
NIC 9258
KA9258
EF IN
TE IN
SP IN
SL IN
SPINDLE
MOTOR
SLED
MOTOR
DISC
P/U IN
LIMIT S/W
OPEN/CLOSE MOTOR
UP/DOWN MOTOR
ROULETTE MOTOR
DM+
DM-
MOTOR DRIVER
SIC1,2,3
LB1641/BA6209
OPEN/CLOSE S/W
UP/DOWM S/W
ROULETTE SENSOR

9-3-1 Main

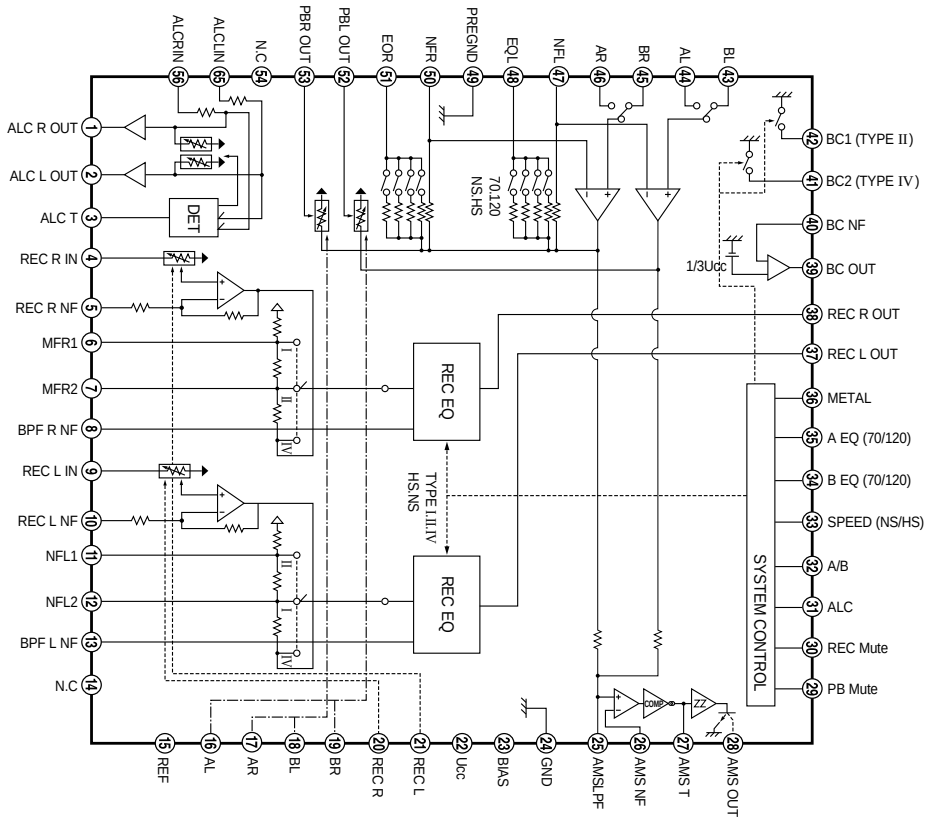
NJU3711 : UIC3



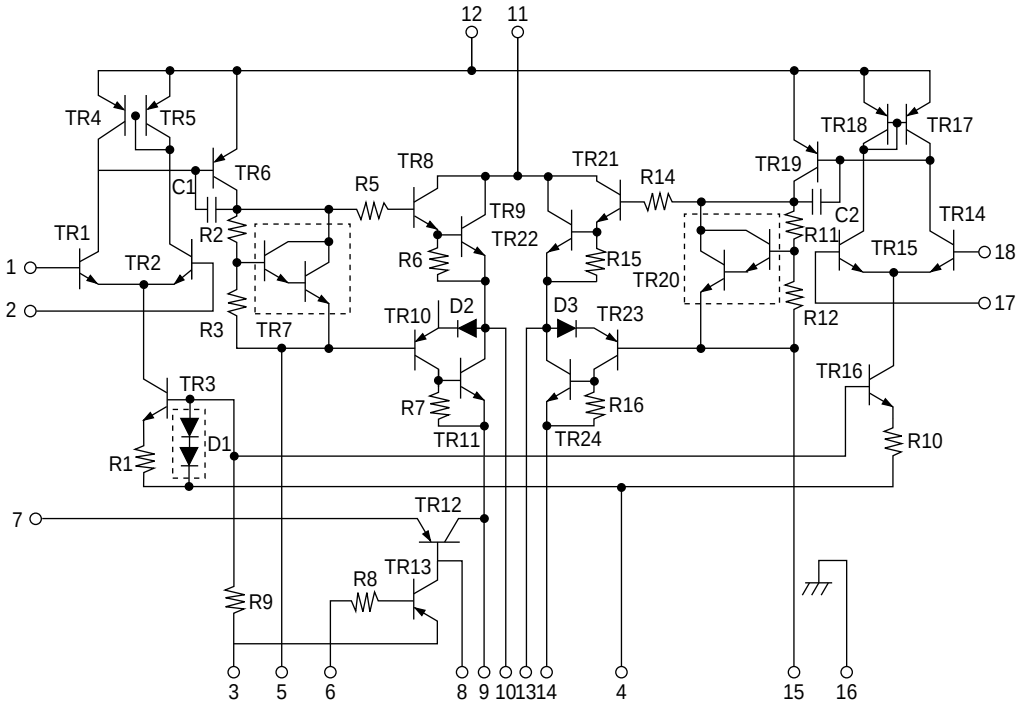
NJU3718 : UIC2,FIC3



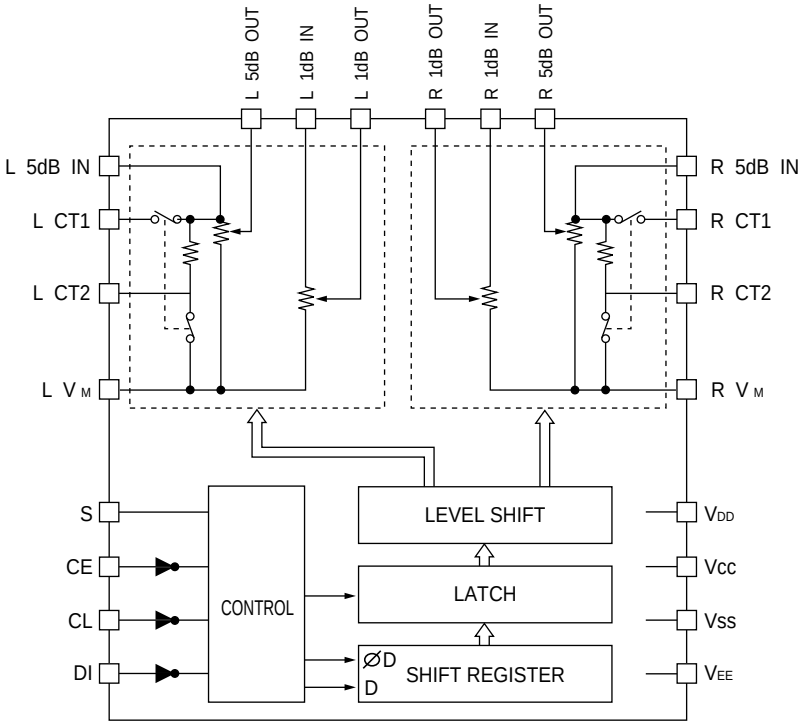
BA3442AKS : JIC1



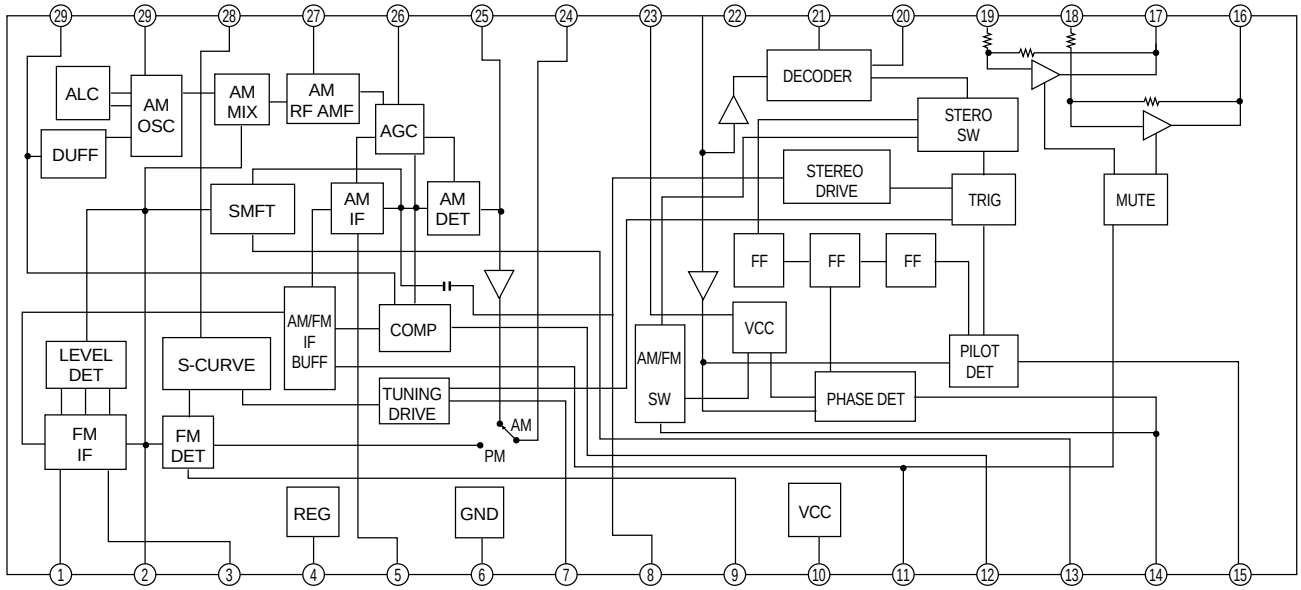
STK4191V : AIC1



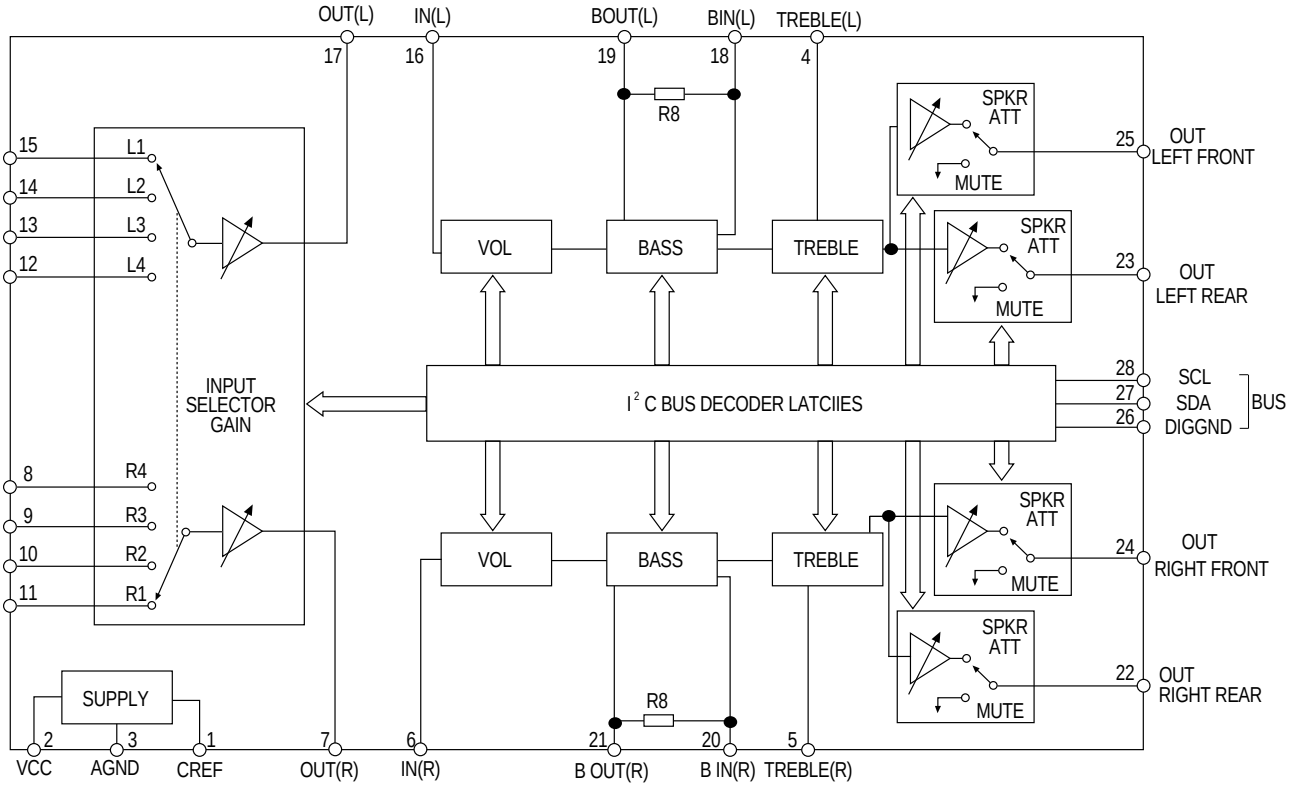
LC7536 : FIC5



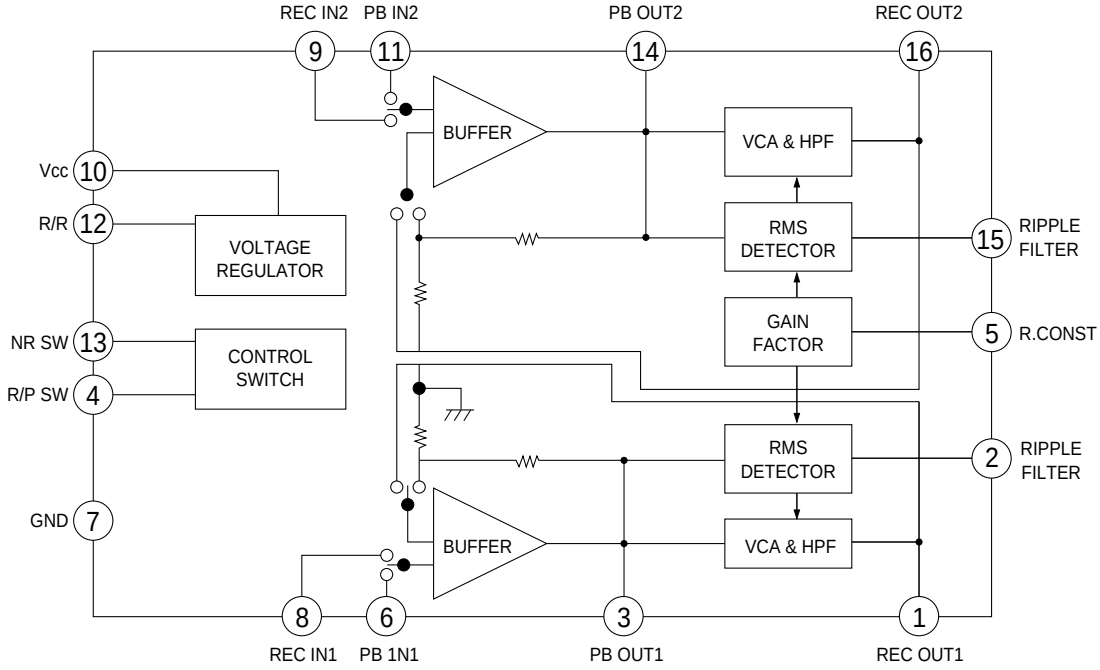
LA1836 : MIC1



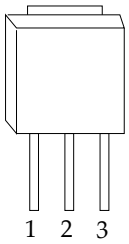
TDA7318 : FIC1



KA2271B : DIC1



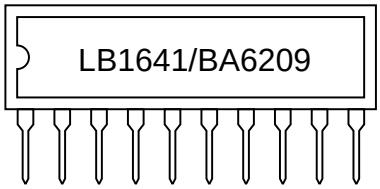
9-3-2 CD

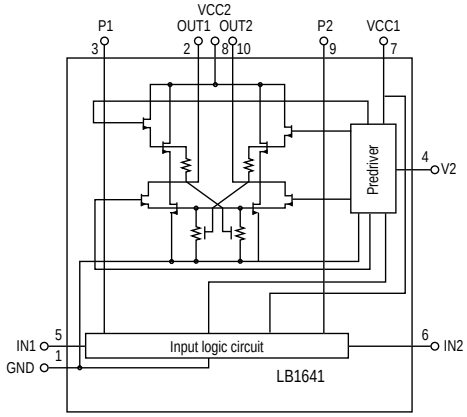


TR	1	2	3
KSR1003 A928	E	C	B

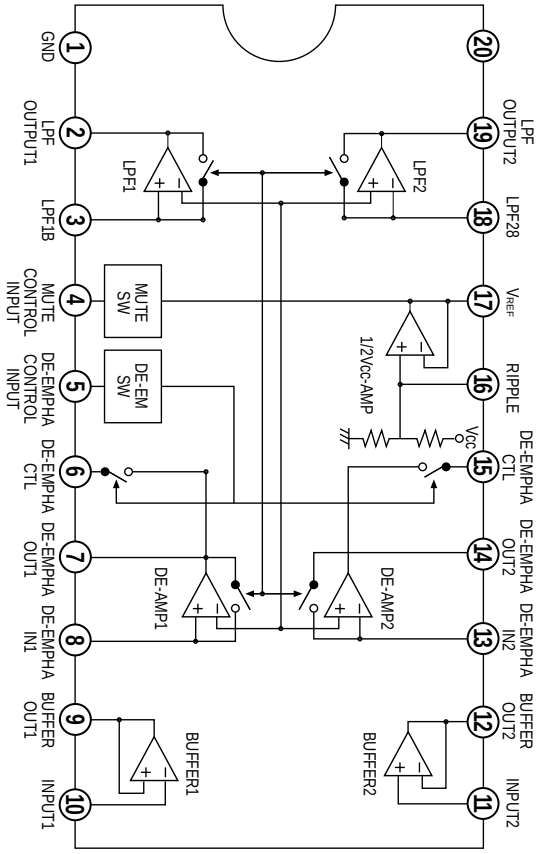
* NOTE : KSB564 ='EBC' TYPE

LB1641/BA6209(MOTOR DRIVER) : SIC1, SIC2,SIC3, NIC1641

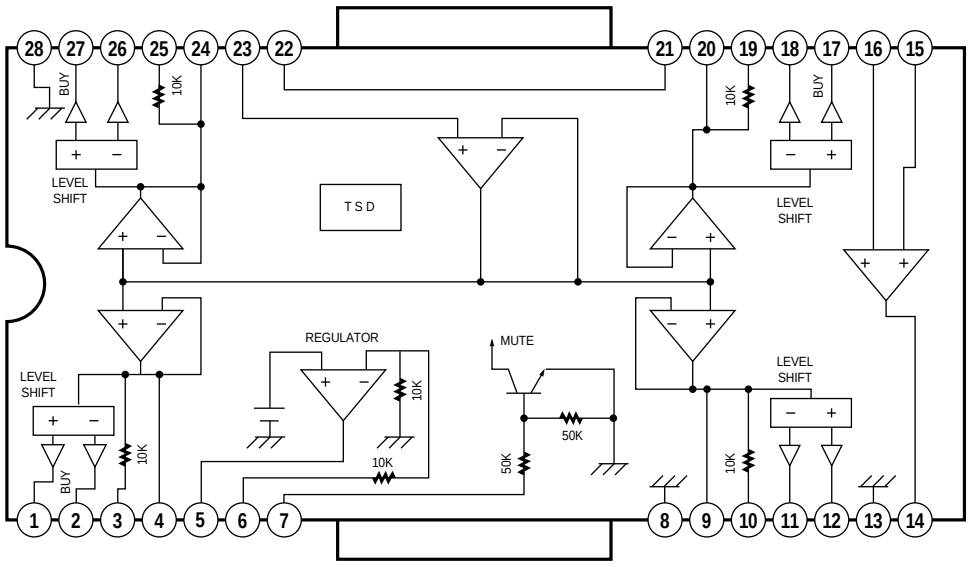




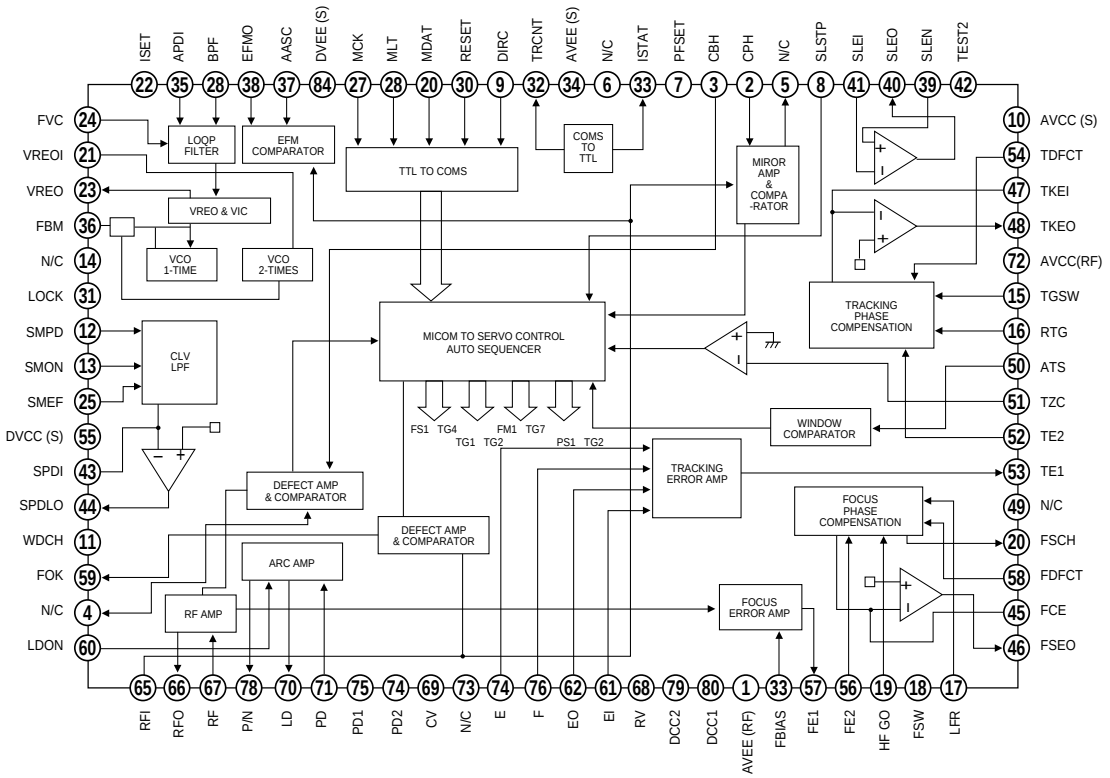
KA9270 : NIC9270



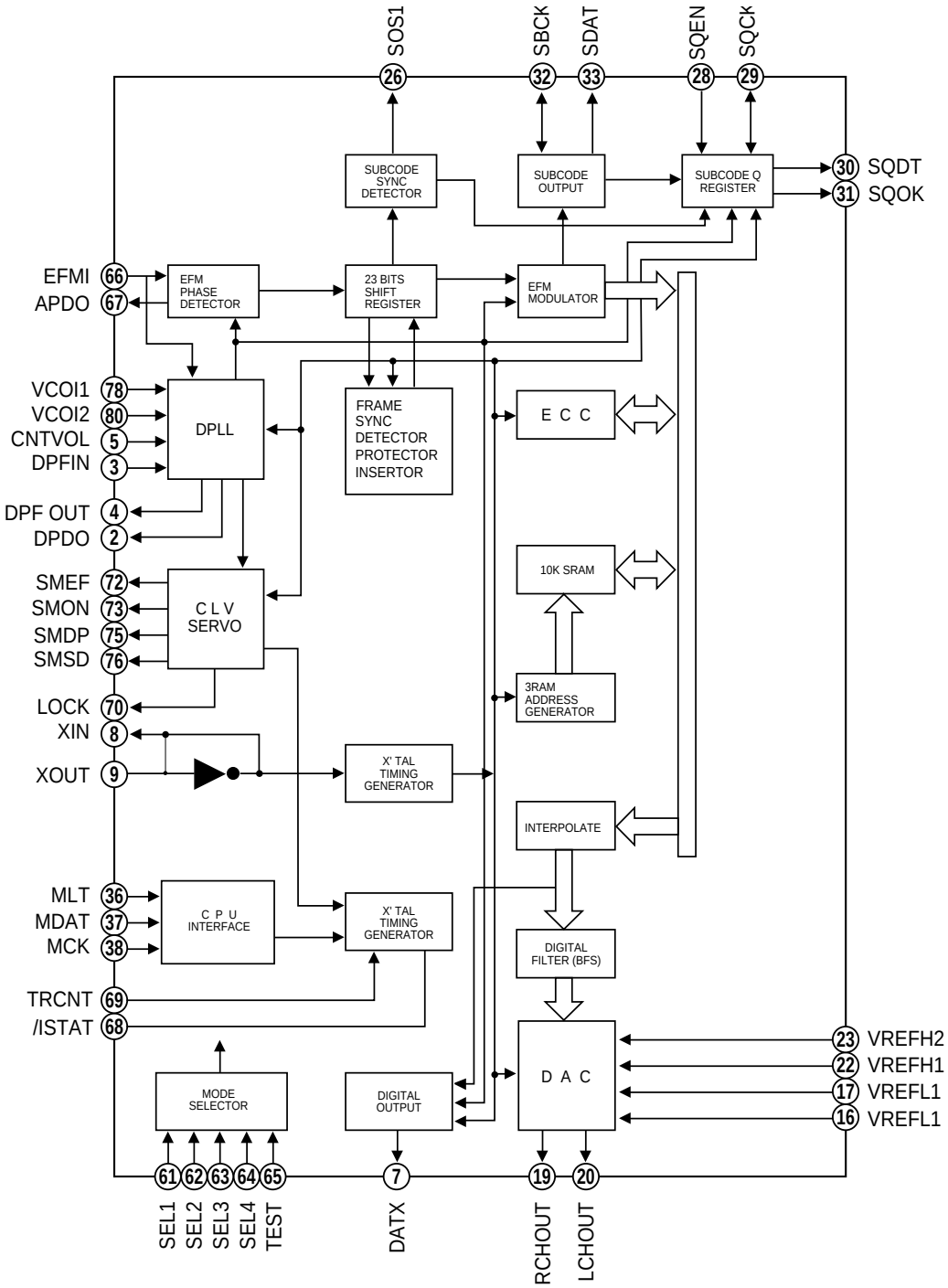
KA9258 : NIC9258



KA9220(ASSP) : NIC9220



KS9282(DSP) : NIC9282



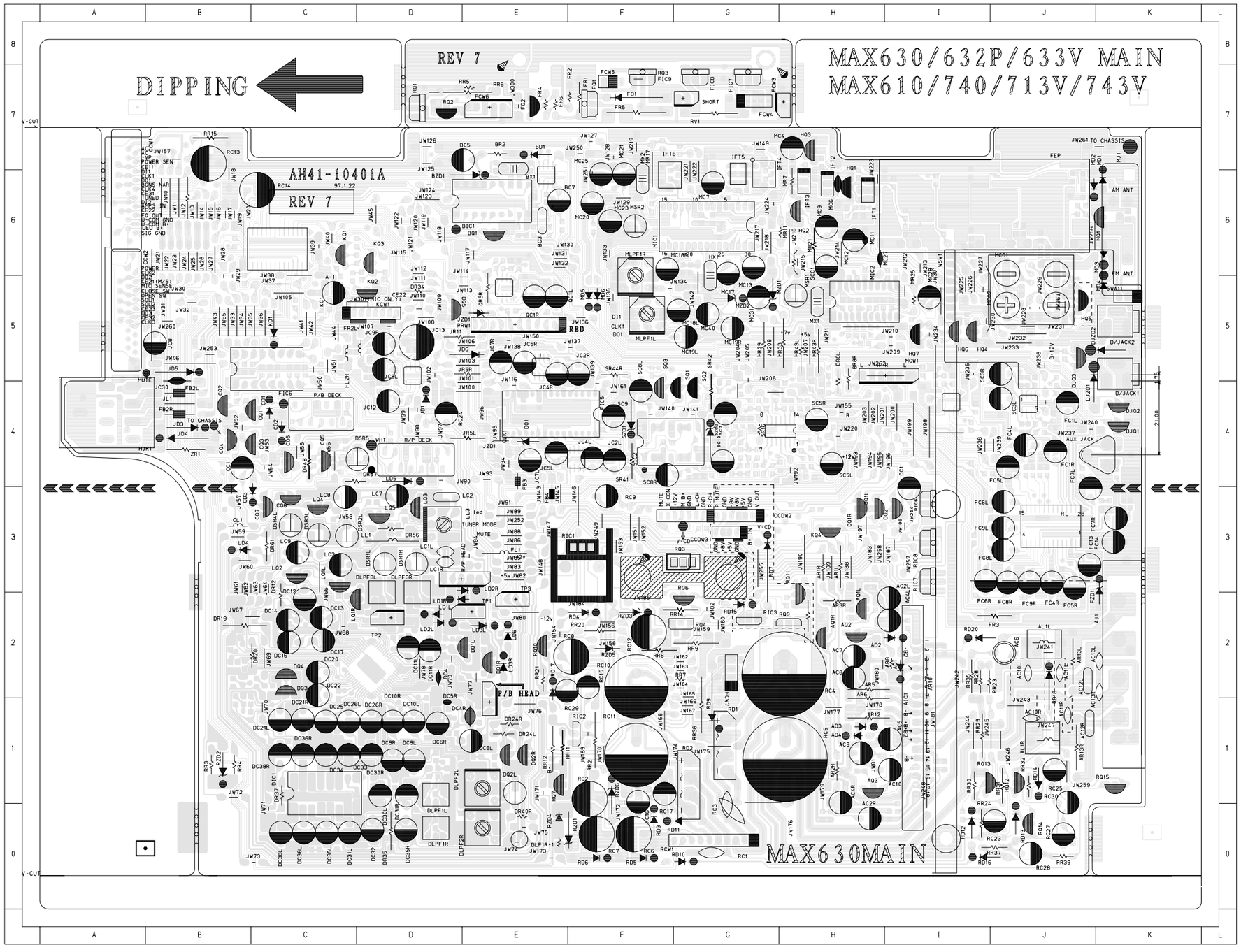
9-3-3 µ-COM : UIC1

No.	Port	Name	I/O	Description
1	P5 2	P ON/OFF	O	M65846 (DSP+ECHO) LATCH
2	PWM 1	CE 22	O	LC7536 (VOLUME IC) CE
3	P2 0	AMPSIN	I	AMPS SIGNAL IN
4	DI2 1	INPUT EXP.DI	I	MAIN AUDIO MUTE (TUNER)
5	2	POWER	O	TUNED
6	3	CLK 4	I	MSM6654 (RELAX) CLOCK
7	4	DO 1	O	LC72321, TDA7318, LC7536
8	5	CLK1		LC72321, TDA7318, LC7536
9	6	DIO1		LC72321 DATA INPUT
10	7	CE11		LC72321 (PLL) CE
11	TEST			
12	RES			
13	XT 1			
14	XT 2			
15	VSS			
16	CF 1			
17	CF 2			
18	VDD			
19	P8 0	KEY 1	I	A/D KEY INPUT 1
20	1	KEY 2	I	A/D KEY INPUT 2
21	2	KEY3	I	A/D KEY INPUT 3
22	3	KEY4	I	A/D KEY INPUT 4
23	4	JOG 21	I	MULTI JOG IN
24	5	JOG 22	I	MULTI JOG IN
25	6	NAR	I	BGNS NAR
26	7	EQ IN	I	EQUALIZER INPUT
27	P7 0	SCOR	I	SCOR INTERRUPT
28	1	T SENS	I	CD TRAY SENSE
29	2	P SENS	I	POWER SENSE
30	3	REMO	I	REMOCON INPUT
31	S 0			
32	1			
33	2			
34	3			
35	4			
36	5			
37	6			
38	7			
39	8			
40	9			
41	10			
42	11			
43	12			
44	13			
45	14			
46	15			
47	VDVP			
48	VP			
49	S 16			

No.	Port	Name	I/O	Description
50	17			
51	18			
52	19			
53	20			
54	21			
55	22			
56	23			
57	24			
58	25			
59	26			
60	27			
61	28			
62	29			
63	30			
64	31			
65	P0 0	OPTION	I	TUNER, CD/VIDEO-CD
66	1	UD S/W	I	V10 UP/DOWN S/W
67	2	FOX	I	FOCUS OK
68	3	LKFS	I	GFS
69	4	MLT	O	DSP/SSP CONTROL LATCH
70	5	MDATA	O	DSP/SSP CONTROL DATA
71	6	MCK	O	DSP/SSP CONTROL CLOCK
72	7	V10M -	O	V10 DOWN MOTOR
73	P1 0	V10M +	O	V10 UP MOTOR
74	1	SUBQ	I	SUB Q DATA INPUT
75	2	SQCK	O	SUBQ DATA INPUT CLOCK
76	3	DSP MT	O	DSP MUTE
77	4	OPEN M	O	CD OPEN MOTOR
78	5	CLOS M	O	CD CLOSE MOTOR
79	6	ROUL -	O	ROULETTE MOTOR -
80	7	ROUL +	O	ROULETTE MOTOR +
81	P3 0	ISTAT	I	SENSE
82	1	LD _XRS	O	LD ON + XRST
83	2	JOG 11	I	JOG VOLUME 1
84	3	JOG 12	I	JOG VOLUME 2
85	4	SLATCH	O	LATCH (VIDEO CD ◄ MAIN)
86	5	SDATA	O	DATA (VIDEO CD ◄MAIN)
87	6	VCLK	I	CLOCK (VIDEO CD ►MAIN)
88	7	CE 32	O	NJU3718 (OUTPUT EXPAND) CE
89	VSS			
90	VDD			
91	P4 0	DO -3	O	NJU3718 DATA OUTPUT
92	1	CLK -3	O	NJU3718 CLOCK
93	2	CE 31	O	NJU3718 (OUTPUT) CE
94	3	CE 23	O	TC9173 (INPUT EXPAND) CE
95	4	SOL 1	O	1 DECK SOLENOID
96	5	SOL 2	O	2 DECK SOLENOID
97	6	MICSNS	I	MIC INPUT SENSE
98	7	CE 21	O	M65840 (KEY CON) LATCH/ST
99	P5 0	DO 2	O	M65840, 65846,MSM6654,TC9173
100	1	CLK2	O	M65840,M65846,TC9173

10. PCB Diagrams

10-1 Main



*** RESISTOR ***

X (H2)
AR10 (I1)
AR12 (H1)
AR13L (J2)
AR13R (J1)
AR1L (H3)
AR1R (H3)
AR2R (H1)
AR3R (H2)
AR5 (H2)
AR6 (H1)
AR8 (I2)
BR2 (E7)
BR8L (H4)
BR8R (H4)
DC4R (E1)
DR12 (C2)
DR19 (B2)
DR20 (C2)
DR24L (E1)
DR24R (E1)
DR34 (D5)
DR35 (D0)
DR37 (C0)
DR40R (E0)
DR48 (C4)
DR56 (D3)
DR57 (C4)
DR61 (C3)
FR1 (F7)
FR2 (F7)
FR3 (I2)
FR4 (E7)
FR5 (F7)
FR6 (E7)
JR11 (D5)
JR5L (D4)
JR5R (D5)
JW13 (B6)
KD3 (D6)
MR11 (H6)
MR21 (H6)
MR25 (I5)
MR29 (G5)
MR33 (H5)
MR43L (H5)
MR43R (H5)
MR7 (H6)
QR5R (E5)
RR11 (E1)
RR12 (E1)
RR14 (F2)
RR15 (B7)
RR2 (F1)
RR20 (F2)
RR21 (E2)
RR23 (I1)
RR24 (I0)
RR28 (I1)
RR29 (I1)
RR3 (B1)
RR30 (I1)
RR31 (J1)
RR32 (J1)
RR35 (I1)
RR36 (G1)
RR37 (I0)
RR39 (J0)
RR4 (B1)
RR5 (E7)
RR6 (E7)
RR7 (F2)
RR8 (F2)
RR9 (F2)
RV1 (G7)
SR16 (G4)
SR41 (F4)
SR42 (G4)
SR44R (F5)
ZR1 (B4)

*** CONDENSER ***

AC10 (H1)
AC10L (J2)
AC10R (J1)
AC11L (J2)
AC11R (J1)
AC12L (J2)
AC12R (J1)
AC13L (K2)
AC13R (K1)
AC2L (H2)
AC2R (H0)
AC4L (H2)
AC4R (H1)
AC5 (I1)
AC6 (J2)
AC7 (H2)
AC8 (H2)
AC9 (H1)
BC3 (E6)
BC5 (E7)
BC7 (E6)
CC1 (B4)
DC10L (D1)
DC10R (D1)
DC11L (D2)
DC11R (D2)
DC12 (C3)
DC13 (C2)
DC14 (C2)
DC16 (C2)
DC17 (C2)
DC20 (C2)
DC21L (C1)
DC21R (C1)
DC22 (C2)
DC25 (C1)
DC26L (C1)
DC26R (D1)
DC30L (D0)
DC30R (D1)
DC31L (C0)
DC31R (D0)
DC32 (D0)
DC33 (C1)
DC34 (C1)
DC35L (C0)
DC35R (D0)
DC36L (C0)
DC36R (C1)
DC38L (C0)
DC38R (C1)
DC4L (D2)
DC5R (D1)
DC6L (E1)
DC6R (D1)
DC9L (D1)
DC9R (D1)
FC13 (J3)
FC14 (K3)
FC1L (J4)
FC1R (J4)
FC4L (J4)
FC4R (J3)
FC5L (J4)
FC5R (J3)
FC6L (J3)
FC6R (I3)
FC7L (J3)
FC7R (K3)
FC8L (J3)
FC8R (J3)
FC9L (J3)
FC9R (J3)
JC12 (D4)
JC13 (D5)
JC2L (F4)
JC2R (F5)
JC30 (B5)
JC4L (F4)
JC4R (E5)
JC5L (E4)
JC5R (E5)
JC7L (E4)
JC7R (E5)
JC8 (B5)
JC9L (D5)
JC9R (D5)
KC1 (C5)
LC1L (D3)
LC1R (D3)
LC2 (D3)
LC3 (C3)
LC7 (D3)
LC8 (C3)
LC9 (C3)
LL1 (D3)
MC11 (H6)
MC12 (H6)
MC13 (G6)
MC17 (G6)
MC18L (G5)
MC18R (F6)
MC19L (G5)
MC19R (G5)
MC20 (F6)
MC21 (F7)
MC23 (F6)
MC25 (F7)
MC27 (H6)
MC28 (I5)
MC31 (G5)
MC4 (H7)
MC40 (G5)
MC6 (H6)
MC7 (G6)
MC9 (H6)
OC1 (I3)
QC1L (E5)
QC1R (E5)
RC1 (G0)
RC10 (F2)
RC11 (F1)
RC12 (F2)
RC13 (B7)
RC14 (B6)
RC15 (F2)
RC16 (F1)
RC17 (F1)
RC2 (F1)
RC23 (J0)
RC24 (D4)
RC25 (J1)
RC27 (J0)
RC28 (J0)
RC29 (E2)
RC3 (G0)
RC30 (J1)
RC4 (H2)
RC5 (H1)
RC6 (F0)
RC7 (F0)
RC8 (E2)
RC9 (F3)
SC10 (G4)
SC3L (J4)
SC3R (J5)
SC5L (H4)
SC5R (H4)
SC7 (G4)
SC8L (F4)
SC8R (G4)
SC9 (F4)
SCC1 (H6)

*** DIODE ***

AD1 (I2)
AD2 (I2)
AD3 (H1)
AD4 (H1)
BD1 (E7)
BZD1 (E6)
CD1 (C4)
CD2 (C4)
CD3 (C3)
DJZD1 (J5)
DJZD2 (J5)
FD1 (F7)
FZD1 (K3)
JD1 (D4)
JD3 (B4)
JD4 (B4)
JD5 (B5)
JD6 (E5)
JZD1 (E4)
JZD1 (E5)
KD1 (C5)
LD1L (D2)
LD1R (D2)
LD2L (D2)
LD2R (E3)
LD3L (E2)
LD3R (E2)
LD4 (B3)
LD5 (D4)
LD6 (E2)
MD1 (K7)
MD2 (J6)
MD3 (K6)
MD4 (K6)
MD5 (F5)
MD6 (F5)
MZD1 (G5)
MZD2 (G5)
RD10 (G0)
RD11 (F0)
RD12 (I0)
RD13 (J0)
RD14 (J1)
RD15 (G2)
RD16 (I0)
RD17 (E2)
RD18 (J2)
RD20 (I2)
RD3 (F0)
RD4 (F2)
RD5 (F0)
RD6 (F0)
RD7 (G3)
RZD1 (F0)
RZD2 (B1)
RZD3 (F2)
RZD5 (F2)
RZD6 (F1)
SZD1 (F4)
SZD2 (G4)

*** TR ***

AQ1L (H2)
AQ1R (H2)
AQ2 (H2)
AQ3 (H1)
BQ1 (E6)
CQ1 (C4)
CQ2 (B4)
CQ3 (C4)
CQ4 (B4)
CQ5 (C4)
CQ6 (C4)
CQ7 (C3)
CQ8 (C3)
DJQ1 (K4)
DJQ2 (K4)
DJQ3 (J5)
DQ1L (E2)
DQ1R (E2)
DQ2L (E1)
DQ2R (E1)
DQ3 (C2)
DQ4 (C2)
DQ5 (D5)
FQ2 (E7)
HQ1 (H6)
HQ2 (H6)
HQ3 (H7)
HQ4 (I5)
HQ5 (J5)
HQ6 (I5)
HQ7 (I5)
KQ1 (C6)
KQ2 (D5)
KQ3 (D6)
KQ4 (H3)
LQ1L (C3)
LQ1R (D2)
LQ2 (C3)
LQ3 (D3)
LQ4 (C3)
LQ5 (D3)
MQ1 (K6)
OQ1L (H3)
OQ1R (H3)
OQ2 (I3)
RIC2 (F1)
RIC3 (G2)
RQ10 (E2)
RQ11 (H3)
RQ12 (J1)
RQ13 (I1)
RQ14 (J0)
RQ15 (K1)
RQ2 (D7)
RQ6 (G2)
RQ7 (E1)
RQ9 (H2)
SQ1 (G4)
SQ2 (G4)
SQ3 (F4)

*** IC&WAFER ***

X (E1)
CCDW2 (G3)
CCDW3 (G3)
DIC1 (C0)
DLPF1L (D1)
DLPF1R (D0)
DLPF3L (D3)
DLPF3R (D3)
FCW3 (H7)
FCW4 (G7)
FCW5 (F7)
FCW6 (E7)
FCW7 (G2)
IFT4 (G7)
IFT5 (G6)
IFT6 (F7)
KCW1 (D5)
MCW1 (I5)
PRW1 (E5)
R/P HEAD (D3)
RCW1 (G0)
SHORT (G7)
SWA11 (K5)
TP1 (E2)
TP2 (D2)
TP3 (E2)

*** CHIP ***

AC14L (I2)
AC14R (I1)
AC3L (H3)
AC3R (H0)
AR11L (I2)
AR11R (I0)
AR14 (I1)
AR15 (H1)
AR2L (H2)
AR30 (H1)
AR31 (H2)
AR3L (H2)
AR4L (I2)
AR4R (I0)
AR5L (H3)
AR5R (H0)
AR7 (I2)
AR9L (I2)
AR9R (I1)
BC1 (E7)
BC2 (E7)
BC4 (E6)
BC6 (E6)
BIC2 (E6)
BIC3 (I4)
BR1 (E6)
BR10L (I4)
BR10R (I5)
BR11 (H4)
BR3 (E6)
BR4 (E6)
BR5 (E6)
BR6 (E6)
BR7L (H5)
BR7R (H4)
BR9L (I4)
BR9R (I5)
CC4 (C4)
CR1L (H3)
CR1R (H3)
CR2L (J3)
CR2R (I3)
CR3L (J3)
CR3R (J3)
DC15 (C2)
DC18 (B2)
DC19 (B2)
DC1L (D2)
DC1R (E2)
DC23 (C2)
DC24 (C2)
DC2L (D2)
DC2R (E2)
DC39L (B2)
DC39R (B1)
DC40L (C0)
DC40R (D0)
DC41 (D4)
DC43 (C4)
DC44 (C4)
DC45L (D2)
DC45R (E1)
DC46L (E1)
DC46R (D0)
DC47L (D1)
DC47R (D0)
DC5L (E1)
DC7L (D1)
DC7R (D1)
DJR1 (J5)
DJR2 (J5)
DR10L (B2)
DR10R (B1)
DR11L (D2)
DR11R (D2)
DR13 (E2)
DR14 (C2)
DR15 (E2)
DR16 (B5)
DR17 (C2)
DR18 (C2)
DR1L (D2)
DR1R (E2)
DR21 (B2)
DR22 (B2)
DR23 (B2)
DR25 (C0)
DR26 (C0)
DR27 (C0)
DR28 (C0)
DR29 (C1)
DR2L (D1)
DR2R (D1)
DR30L (C0)
DR30R (D0)
DR31L (C0)
DR31R (C1)
DR32L (C0)
DR32R (D0)
DR33L (D1)
DR33R (D1)
DR36 (C1)
DR38 (D1)
DR39 (D5)
DR3L (D1)
DR3R (D1)
DR40L (E1)
DR41L (E1)
DR41R (E0)
DR42 (C5)
DR43 (C5)
DR44 (C5)
DR45 (C4)
DR46 (C4)
DR47 (D4)
DR49 (B4)
DR4L (D1)
DR4R (D1)
DR50 (C5)
DR51 (C5)
DR52 (C5)
DR53 (B4)
DR54 (B4)
DR55 (D4)
DR58 (D3)
DR59 (B4)
DR5L (D1)
DR5R (D0)
DR60 (C2)
DR62 (D3)
DR63 (C5)
DR64 (B5)
DR65 (B5)
DR66 (C5)
DR67 (C5)
DR68 (C5)
DR6L (E1)
DR6R (D1)
DR7 (C1)
DR70 (C5)
DR71L (C1)
DR71R (D1)
DR7L (D2)
DR7R (D2)
DR8 (D0)
DR9L (C2)
DR9R (B1)
DSR6 (C4)
FC11 (J3)
FC12 (J3)
FC2L (J4)
FC2R (J4)
FC3L (J4)
FC3R (J4)
FDC1 (C1)
FDC2 (C2)
FDC3 (E1)
FFC1 (J3)
FIC1 (J3)
FIC2 (F4)
FIC3 (C6)
FIC4 (E5)
FJ1 (E2)
FJ2 (E1)
FJC1 (E4)
FJC2 (E4)
FJC3 (D4)
FJC4L (B5)
FR1L (J4)
FR1R (J4)
FR2L (J4)
FR2R (J4)
FR4L (I4)
FR4R (I3)
FR4R (B4)
FSC1 (H4)
FSC2 (G5)
GR1 (C5)
HIC1 (D5)
J10 (B6)
J11 (C3)
J12 (C2)
J13 (G4)
J14 (D1)
J16 (D6)
J17 (F4)
J18 (F5)
J19 (G6)
J20 (G6)
J21 (G6)
J22 (H6)
J23 (G5)
J24 (G4)
J25 (H4)
J26 (G3)
J27 (I4)
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J29 (H5)
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J301 (J7)
J31 (H6)
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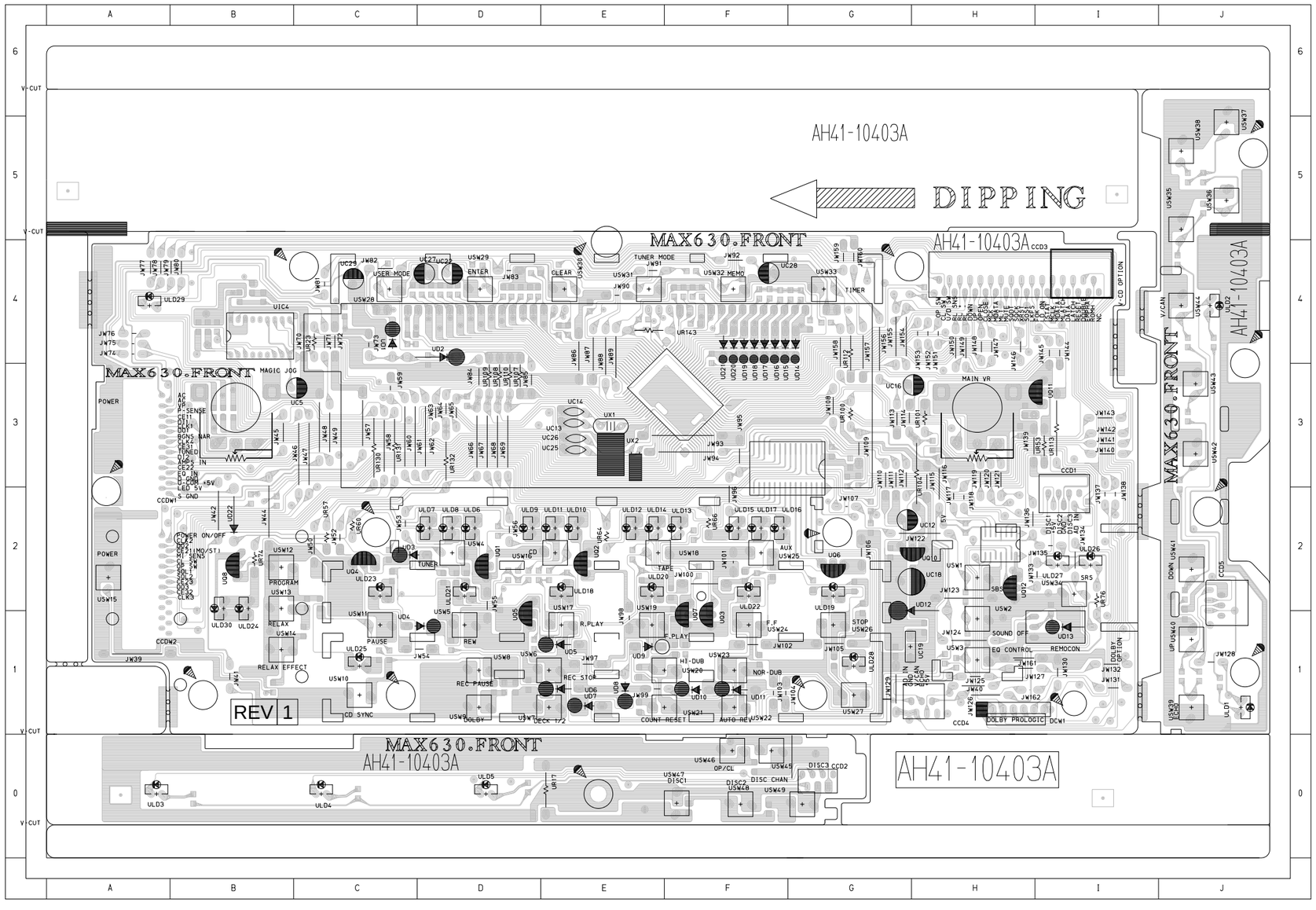
J39 (J5)
J40 (B1)
J41 (J3)
J42 (J4)
J43 (C2)
J44 (J6)
J45 (D5)
J46 (J5)
J47 (J6)
JC10L (D5)
JC10R (C5)
JC11 (A4)
JF1 (J6)
JF2 (J7)
JIC1 (D2)
JR11L (E4)
JR11R (E4)
JR1L (F4)
JR1R (E5)
JR2L (E4)
JR2R (E5)
JR6L (D4)
JR6R (D5)
JR7L (D4)
JR7R (D5)
JR8L (D4)
JR8R (D5)
JR9 (A5)
KR1 (B5)
KR2 (D6)
KR3 (C6)
KR4 (C5)
KR5 (D5)
KR6 (C5)
LC10L (D2)
LC10R (D2)
LC4 (D3)
LC5 (D3)
LC6 (D3)
MC1 (I6)
MC10 (H6)
MC14 (G6)
MC15 (G6)
MC16L (G6)
MC16R (G5)
MC2 (J6)
MC22 (F6)
MC24 (I6)
MC26 (G6)
MC29 (H5)
MC3 (J5)
MC30 (H5)
MC32 (I6)
MC33 (H5)
MC34 (H5)
MC35 (H5)
MC36 (I6)
MC42 (K5)
MC43 (G6)
MC44 (I6)
MC45 (J6)
MC47L (I4)
MC47R (J3)
MC48 (H6)
MC5 (H6)
MC8 (G7)
MFC1 (I6)
MR1 (I6)
MR10 (H6)
MR12 (J5)
MR13 (I5)
MR14 (I5)
MR15 (I5)
MR16 (I5)
MR18 (J6)
MR19 (I5)
MR2 (J6)
MR20 (H6)
MR23 (F7)
MR24 (G7)
MR26 (F6)
MR26L (F5)
MR26R (F6)
MR27 (F6)
MR28 (F6)
MR3 (J6)
MR30 (H5)
MR31 (I5)
MR32 (F6)
MR34 (F6)
MR35 (H5)
MR36 (H5)
MR37 (H5)
MR38 (H5)
MR39 (H5)
MR4 (I6)
MR40 (H5)
MR41 (H5)
MR42L (G6)
MR42R (G5)
MR44L (H4)
MR44R (H4)
MR45 (H7)
MR46 (H7)
MR47 (J6)
MR48 (J6)
MR49 (I6)
MR5 (H6)
MR50 (I5)
MR6 (H7)
MR8 (H6)
MR9 (H6)
MR91 (G6)
OPT1L (D1)
OPT1R (D0)
OPT2L (F4)
OPT2R (F4)
QIC1 (E5)
QR1L (E5)
QR1R (E5)
QR2L (E6)
QR2R (E5)
QR3L (E6)
QR3R (E5)
QR4L (E6)
QR4R (E5)
QR5L (E6)
RR10 (E1)
RR13 (G2)
RR15 (B7)
RR16 (F1)
RR17 (F1)
RR18 (G2)
RR22 (H2)
RR25 (J0)
RR26 (F1)
RR27 (J0)
RR33 (J1)
RR34 (J0)
RR38 (I0)
RR41 (E2)
RR42 (E2)
RR43 (F3)
SC2L (J4)
SC2R (J4)
SC6 (G4)
SIC1 (H4)
SIC3 (J4)
SJW1 (J5)
SJW2 (J6)
SJW3 (K6)
SR10 (H4)
SR11 (H4)
SR12 (H4)
SR13L (H4)
SR13R (H4)
SR14 (G4)
SR15 (G4)
SR17 (G4)
SR18 (G4)
SR19 (G4)
SR1L (J4)
SR1R (J4)
SR20 (G4)
SR21 (G4)
SR22 (G4)
SR23 (G4)
SR24 (G4)
SR25 (G4)
SR26 (G4)
SR27 (H4)
SR28 (G4)
SR29 (G4)
SR2L (J4)
SR2R (J4)
SR30L (G4)
SR30R (G4)
SR31L (H4)
SR31R (H4)
SR32 (G4)
SR33 (G4)
SR34 (G4)
SR35 (G4)
SR36 (G4)
SR39L (F4)
SR39R (F4)
SR3L (J4)
SR3R (J4)
SR40L (G4)
SR40R (F4)
SR43 (F4)
SR44L (F4)
SR4L (J4)
SR4R (J4)
SR5L (G4)
SR5R (G4)
SR6L (H4)
SR6R (H4)
SR7L (H4)
SR7R (H4)
SR8 (H4)
SR9 (G4)
XC1L (K3)
XC1R (K3)
XR1L (J4)
XR1R (K4)
XR2L (K3)
XR2R (K3)
ZC1 (B4)
ZC10 (I1)
ZC2 (C5)
ZC3 (D5)
ZC6 (E2)
ZC7 (E2)
ZC8 (H1)
ZC9 (H1)
ZR2 (C5)
ZR3 (D5)



XXX RESISTOR XXX

UR100 (G3)
UR101 (H3)
UR104 (H2)
UR107 (D3)
UR108 (D3)
UR109 (D3)
UR110 (D3)
UR112 (G3)
UR113 (I3)
UR130 (C3)
UR131 (C3)
UR132 (D2)
UR143 (E4)
UR17 (E0)
UR23 (C4)
UR53 (I3)
UR57 (C2)
UR60 (C2)
UR64 (E2)
UR66 (F2)
UR74 (B2)
UR76 (I1)

XXX CONDENSER XXX

UC12 (G2)
UC13 (E3)
UC14 (E3)
UC16 (G3)
UC18 (G2)
UC22 (D4)
UC25 (E3)
UC26 (E3)
UC27 (D4)
UC28 (F4)
UC29 (C4)
UC5 (B3)

XXX DIODE XXX

UD1 (C4)
UD10 (F1)
UD11 (F1)
UD12 (G2)
UD13 (I1)
UD14 (G4)
UD15 (F4)
UD16 (F4)
UD17 (F4)
UD18 (F4)
UD19 (F4)
UD2 (D4)
UD20 (F4)
UD21 (F4)
UD22 (B2)
UD3 (C2)
UD4 (D1)
UD5 (E1)
UD6 (E1)
UD7 (E1)
UD8 (E1)
UD9 (E1)

XXX TR XXX

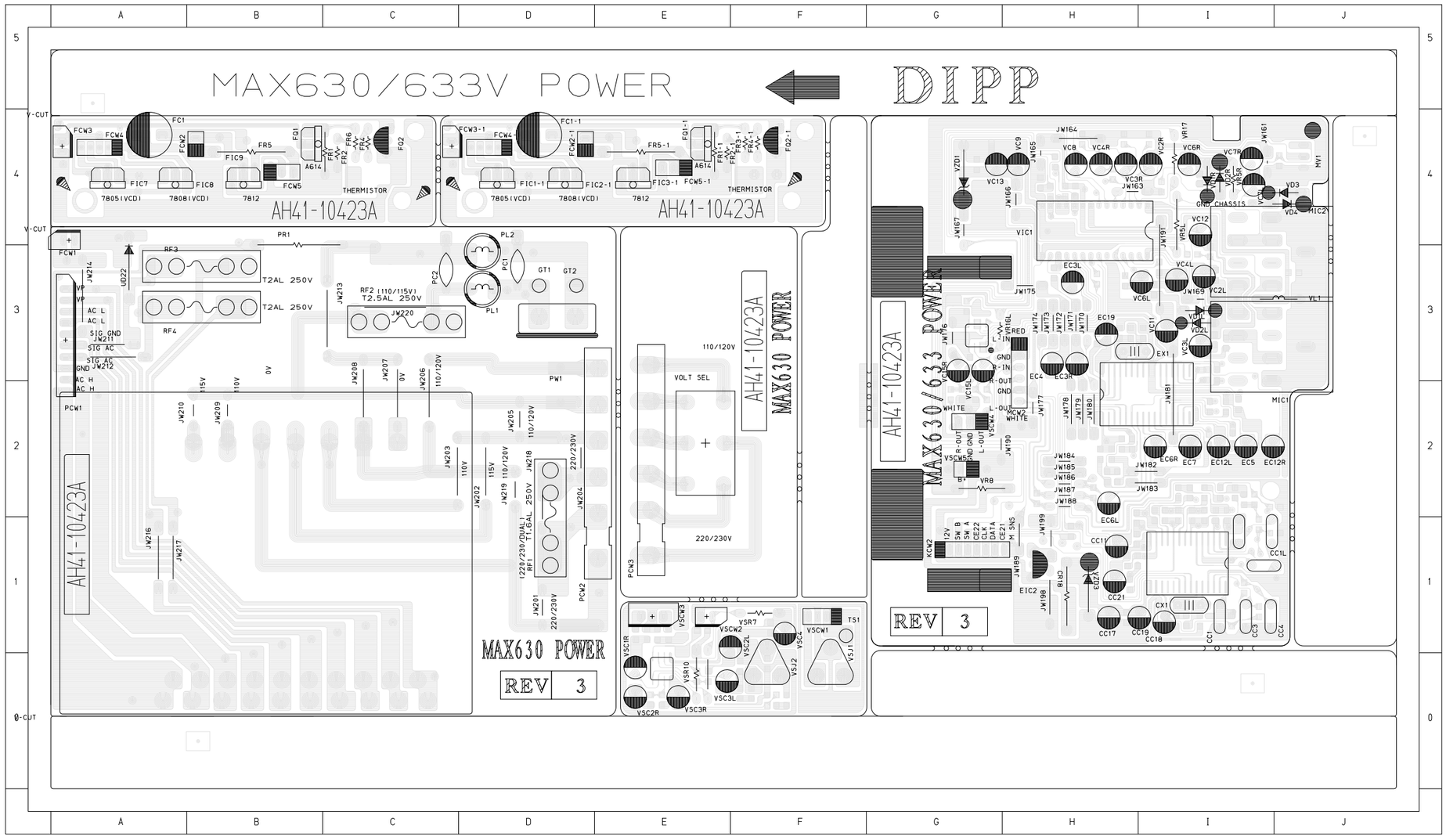
UQ1 (D2)
UQ10 (H2)
UQ11 (I3)
UQ12 (H2)
UQ2 (E2)
UQ3 (F1)
UQ4 (C2)
UQ5 (D1)
UQ6 (G2)
UQ7 (F1)
UQ8 (B2)

XXX IC&WAFER XXX

DCW1 (H1)
UC19 (G1)
UIC1 (F3)
USW1 (H2)
USW10 (C1)
USW11 (C1)
USW12 (B2)
USW13 (B2)
USW14 (B1)
USW15 (A2)
USW16 (E2)
USW17 (E1)
USW18 (E2)
USW19 (E1)
USW2 (H1)
USW20 (F1)
USW21 (F1)
USW22 (F1)
USW23 (F1)
USW24 (F1)
USW25 (F2)
USW26 (G1)
USW27 (G1)
USW28 (C4)
USW29 (D4)
USW3 (H1)
USW30 (E4)
USW31 (E4)
USW32 (F4)
USW33 (G4)
USW34 (I2)
USW35 (J5)
USW36 (J5)
USW37 (J5)
USW38 (J5)
USW39 (J1)
USW4 (D2)
USW40 (J1)
USW41 (J2)
USW42 (J3)
USW43 (J3)
USW44 (J4)
USW45 (F0)
USW46 (F0)
USW47 (F0)
USW48 (F0)
USW49 (G0)
USW5 (D1)
USW6 (E1)
USW7 (E1)
USW8 (D1)
USW9 (D1)

XXX CHIP XXX

JW1 (C2)
JW10 (I4)
JW15 (D2)
JW16 (F1)
JW17 (H1)
JW18 (J1)
JW2 (D2)
JW3 (D2)
JW4 (F1)
JW5 (D4)
JW6 (F2)
JW7 (H1)
JW8 (G2)
JW9 (H4)
UC1 (B4)
UC10 (G3)
UC17 (G1)
UC2 (B4)
UC21 (I2)
UC23 (E4)
UC3 (B4)
UC4 (B4)
UC6 (G2)
UC7 (H3)
UC8 (H3)
UC9 (G3)
UIC1 (F3)
UR1 (J4)
UR10 (J4)
UR103 (H2)
UR105 (G2)
UR106 (H1)
UR11 (J1)
UR111 (G4)
UR114 (F4)
UR115 (F4)
UR12 (J4)
UR121 (H3)
UR124 (B3)
UR125 (B3)
UR126 (B3)
UR127 (B2)
UR128 (B2)
UR129 (D3)
UR13 (B0)
UR134 (D4)
UR135 (E4)
UR136 (E4)
UR137 (F4)
UR138 (F4)
UR139 (F4)
UR14 (C0)
UR140 (F4)
UR141 (F4)
UR142 (F4)
UR15 (D0)
UR16 (F0)
UR18 (F0)
UR19 (F0)
UR2 (J5)
UR20 (I2)
UR21 (B4)
UR22 (B4)
UR24 (H2)
UR25 (H1)
UR26 (D2)
UR27 (D1)
UR28 (D1)
UR29 (D1)
UR3 (J5)
UR30 (D1)
UR31 (D1)
UR32 (C1)
UR33 (C2)
UR34 (C2)
UR35 (C1)
UR36 (B1)
UR37 (D2)
UR38 (E2)
UR39 (F2)
UR4 (J5)
UR40 (F1)
UR41 (E1)
UR42 (E1)
UR43 (F1)
UR44 (F1)
UR45 (F2)
UR46 (G2)
UR47 (G1)
UR48 (C4)
UR49 (D4)
UR5 (J1)
UR50 (E4)
UR51 (F4)
UR52 (F4)
UR54 (H2)
UR55 (G3)
UR56 (G3)
UR58 (F2)
UR6 (J1)
UR61 (D2)
UR62 (D2)
UR63 (D2)
UR65 (E2)
UR67 (F2)
UR68 (E2)
UR69 (G2)
UR7 (J2)
UR70 (E2)
UR71 (D2)
UR72 (F2)
UR73 (C2)
UR75 (C1)
UR77 (G2)
UR78 (C4)
UR79 (C4)
UR8 (J3)
UR80 (C4)
UR81 (C4)
UR82 (D4)
UR83 (D4)
UR84 (D4)
UR85 (D4)
UR86 (D4)
UR87 (D4)
UR88 (D4)
UR89 (D4)
UR9 (J3)
UR90 (D4)
UR91 (D4)
UR92 (D4)
UR93 (E4)



*** RESISTOR ***

CR18 (H1)
FR1 (C4)
FR1-1 (E4)
FR2 (C4)
FR2-1 (E4)
FR3-1 (F4)
FR4 (C4)
FR4-1 (F4)
FR5 (B4)
FR5-1 (E4)
FR6 (C4)
PR1 (B4)
VR16L (G3)
VR17 (I4)
VR5L (I3)
VR5R (I4)
VR8 (G2)
VSR10 (E0)
VSR7 (F1)

*** CONDENSER ***

CC1 (I1)
CC11 (H1)
CC17 (H1)
CC18 (I1)
CC19 (I1)
CC1L (I1)
CC21 (H1)
CC3 (I1)
CC4 (I1)
EC12L (I2)
EC12R (I2)
EC19 (H3)
EC3L (H3)
EC3R (H3)
EC4 (H3)
EC5 (I2)
EC6L (H2)
EC6R (I2)
EC7 (I2)
FC1 (A4)
FC1-1 (D4)
PC1 (D3)
PC2 (C3)
VC11 (I3)
VC12 (I4)
VC13 (G4)
VC15L (G3)
VC15R (G3)
VC2L (I3)
VC2R (I4)
VC3L (I3)
VC3R (H4)
VC4L (I3)
VC4R (H4)
VC6L (I3)
VC6R (I4)
VC7L (I4)
VC7R (I4)
VC8 (H4)
VC9 (H4)
VSC1R (E0)
VSC2L (F1)
VSC2R (E0)
VSC3L (E0)
VSC3R (E0)
VSC4 (F1)

*** DIODE ***

UD22 (A4)
VD1L (I3)
VD1R (I4)
VD2L (I3)
VD2R (I4)
VD3 (I4)
VD4 (J4)
VZD1 (G4)
VZD3 (H1)

*** TR ***

EIC2 (H1)
FQ2 (C4)
FQ2-1 (F4)

*** IC&WAFER ***

FCW1 (A4)
FCW2 (B4)
FCW2-1 (D4)
FCW3 (A4)
FCW3-1 (C4)
FCW4 (A4)
FCW4-1 (D4)
FCW5 (B4)
FCW5-1 (E4)
KCW2 (G1)
MCW2 (H3)
PCW1 (A3)
VOLT SEL (E2)
VSCW1 (F1)
VSCW2 (E1)
VSCW3 (E1)
VSCW4 (G2)
VSCW5 (G2)

***
CC
CC
CC
CC
CC
CC
CC
CC
CC
CC
CC
CR
CR
CR
CR
CR
CR
CR
CR
CR
CR
CR
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CR
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CR
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CR
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EC
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EC
EC
EC
EC
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EC
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EC
EC
EC
EC
EC
EC
ER
ER
ER
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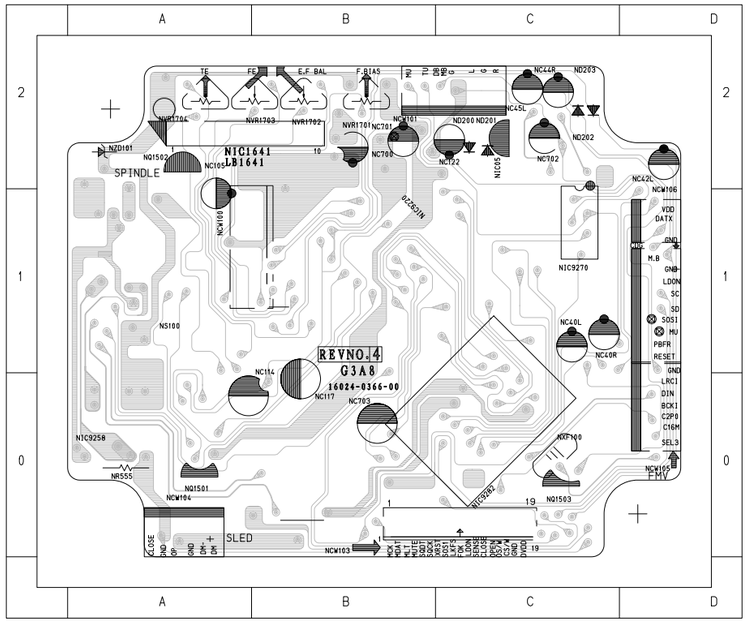
ER
ER
ER
ER
JW
JW
JW
JW
JW
JW
VC
VC

10-4-1 Top View



*** RESISTOR ***

NR555 (A0)

*** CONDENSER ***

NC105 (A1)
NC114 (A0)
NC117 (B0)
NC122 (C2)
NC40L (C1)
NC40R (C1)
NC42L (D2)
NC44R (C2)
NC45L (C2)
NC700 (B2)
NC701 (B2)
NC702 (C2)
NC703 (B0)

*** DIODE ***

ND200 (C2)
ND201 (C2)
ND202 (C2)
ND203 (C2)
NZD101 (A2)

*** TR ***

NIC05 (C2)
NQ1501 (A0)
NQ1502 (A2)
NQ1503 (C0)

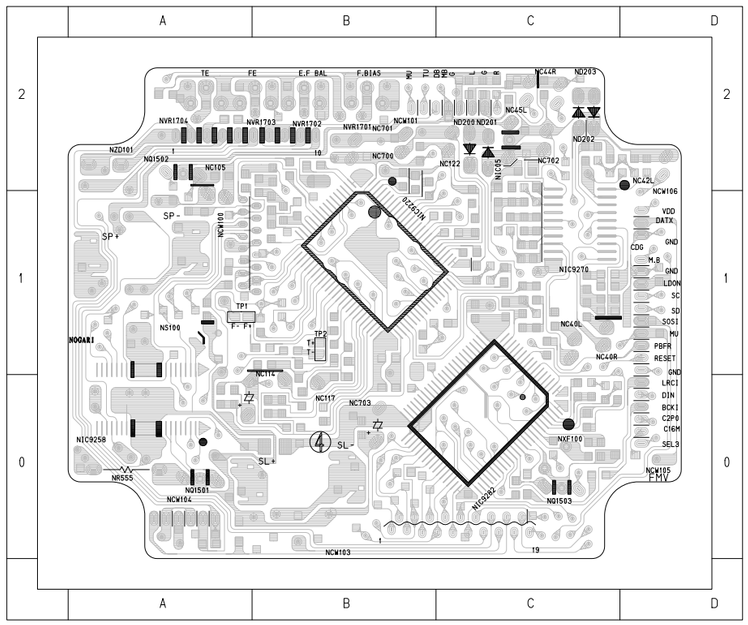
*** IC&WAFER ***

NCW101 (C2)
NCW104 (A0)
NCW105 (D1)
NCW106 (D1)

*** CHIP ***

103 (C0)
103 (B0)
NC100 (B1)
NC1000 (C1)
NC1001 (C1)
NC101 (B2)
NC102 (B2)
NC103 (B2)
NC104 (A2)
NC107 (B1)
NC108 (B1)
NC109 (A2)
NC110 (A2)
NC111 (B1)
NC112 (B1)
NC113 (B1)
NC115 (A0)
NC116 (B1)
NC118 (B0)
NC119 (C1)
NC120 (C1)
NC121 (C1)
NC124 (C1)
NC125 (C1)
NC190 (B2)
NC200 (C0)
NC2000 (B1)
NC201 (C0)
NC202 (C0)
NC203 (C0)
NC204 (C1)
NC205 (C1)
NC400 (C2)
NC41L (C1)
NC41R (C1)
NC42R (C2)
NC43L (C1)
NC43R (D2)
NC44L (C1)
NC45R (C2)
NC46L (C2)
NC500 (A2)
NC600 (D1)
NC601 (B1)
NC602 (C2)
NC603 (A0)
NIC9220 (B1)
NIC9258 (A0)
NIC9270 (C1)
NIC9282 (C0)
NL100 (B0)
NR100 (B1)
NR101 (A1)
NR102 (A1)
NR103 (B1)
NR104 (B1)
NR105 (B0)
NR106 (B0)
NR107 (B0)
NR108 (B0)
NR109 (B1)
NR110 (B0)
NR111 (A0)
NR112 (B0)
NR113 (C1)
NR114 (B1)
NR115 (C1)
NR116 (B2)
NR117 (B2)
NR118 (A2)
NR119 (C1)
NR190 (B2)
NR191 (B1)
NR200 (C0)
NR201 (C0)
NR202 (C0)
NR203 (C1)
NR204 (C1)
NR205 (C1)
NR40L (C1)
NR40R (C1)
NR41L (C1)
NR41R (C1)
NR42L (C1)
NR42R (C1)
NR43L (C1)
NR43R (C1)
NR44L (C1)
NR44R (C2)
NR45L (C1)
NR45R (C2)
NR46L (C1)
NR46R (D2)
NR47L (C2)
NR47R (C2)
NR601 (C0)
NR602 (C0)
NR603 (C0)
NR604 (C1)
NR605 (A1)
NR606 (B2)
NR607 (D0)
NR608 (C1)
NR609 (C2)
NR610 (A1)
NR611 (D2)
NR612 (B0)
NR613 (A0)
NRD (C1)

10-4-2 Bottom View



*** RESISTOR ***

NR555 (A0)

*** CONDENSER ***

NC105 (A1)
NC114 (A0)
NC117 (B0)
NC122 (C2)
NC40L (C1)
NC40R (C1)
NC42L (D2)
NC44R (C2)
NC45L (C2)
NC700 (B2)
NC701 (B2)
NC702 (C2)
NC703 (B0)

*** DIODE ***

ND200 (C2)
ND201 (C2)
ND202 (C2)
ND203 (C2)
NZD101 (A2)

*** TR ***

NIC05 (C2)
NQ1501 (A0)
NQ1502 (A2)
NQ1503 (C0)

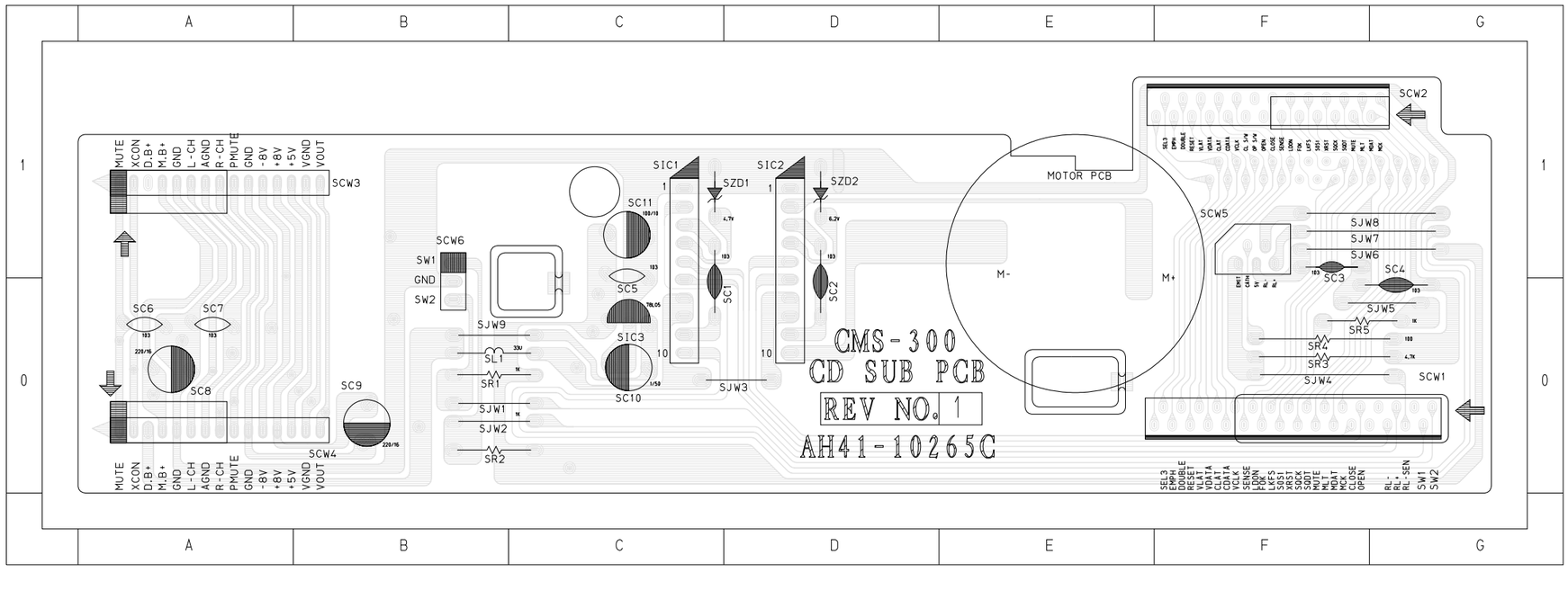
*** IC&WAFER ***

NCW101 (C2)
NCW104 (A0)
NCW105 (D1)
NCW106 (D1)

*** CHIP ***

103 (C0)
103 (B0)
NC100 (B1)
NC1000 (C1)
NC1001 (C1)
NC101 (B2)
NC102 (B2)
NC103 (B2)
NC104 (A2)
NC107 (B1)
NC108 (B1)
NC109 (A2)
NC110 (A2)
NC111 (B1)
NC112 (B1)
NC113 (B1)
NC115 (A0)
NC116 (B1)
NC118 (B0)
NC119 (C1)
NC120 (C1)
NC121 (C1)
NC124 (C1)
NC125 (C1)
NC190 (B2)
NC200 (C0)
NC2000 (B1)
NC201 (C0)
NC202 (C0)
NC203 (C0)
NC204 (C1)
NC205 (C1)
NC400 (C2)
NC41L (C1)
NC41R (C1)
NC42R (C2)
NC43L (C1)
NC43R (D2)
NC44L (C1)
NC45R (C2)
NC46L (C2)
NC500 (A2)
NC600 (D1)
NC601 (B1)
NC602 (C2)
NC603 (A0)
NIC9220 (B1)
NIC9258 (A0)
NIC9270 (C1)
NIC9282 (C0)
NL100 (B0)
NR100 (B1)
NR101 (A1)
NR102 (A1)
NR103 (B1)
NR104 (B1)
NR105 (B0)
NR106 (B0)
NR107 (B0)
NR108 (B0)
NR109 (B1)
NR110 (B0)
NR111 (A0)
NR112 (B0)
NR113 (C1)
NR114 (B1)
NR115 (C1)
NR116 (B2)
NR117 (B2)
NR118 (A2)
NR119 (C1)
NR190 (B2)
NR191 (B1)
NR200 (C0)
NR201 (C0)
NR202 (C0)
NR203 (C1)
NR204 (C1)
NR205 (C1)
NR40L (C1)
NR40R (C1)
NR41L (C1)
NR41R (C1)
NR42L (C1)
NR42R (C1)
NR43L (C1)
NR43R (C1)
NR44L (C1)
NR44R (C2)
NR45L (C1)
NR45R (C2)
NR46L (C1)
NR46R (D2)
NR47L (C2)
NR47R (C2)
NR601 (C0)
NR602 (C0)
NR603 (C0)
NR604 (C1)
NR605 (A1)
NR606 (B2)
NR607 (D0)
NR608 (C1)
NR609 (C2)
NR610 (A1)
NR611 (D2)
NR612 (B0)
NR613 (A0)
NRD (C1)

10-4-3 SUB



*** RESISTOR ***

SR1 (B0)
SR2 (B0)
SR3 (F0)
SR4 (F0)
SR5 (F0)

*** CONDENSER ***

SC1 (C0)
SC10 (C0)
SC11 (C1)
SC2 (D0)
SC3 (F1)
SC4 (F0)
SC5 (C1)
SC6 (A0)
SC7 (A0)
SC8 (A0)
SC9 (B0)

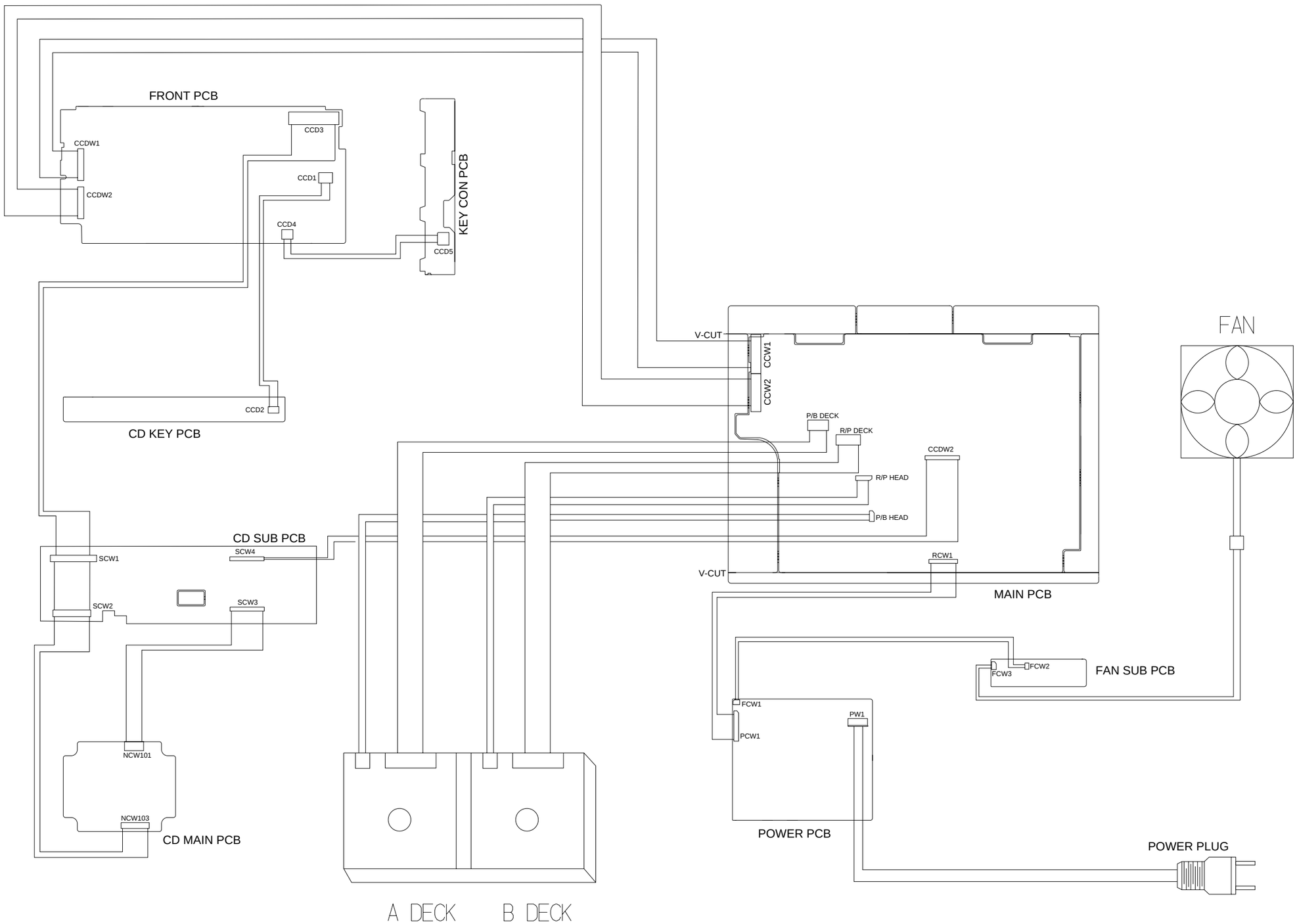
*** DIODE ***

SZD1 (C1)
SZD2 (D1)

*** TR ***

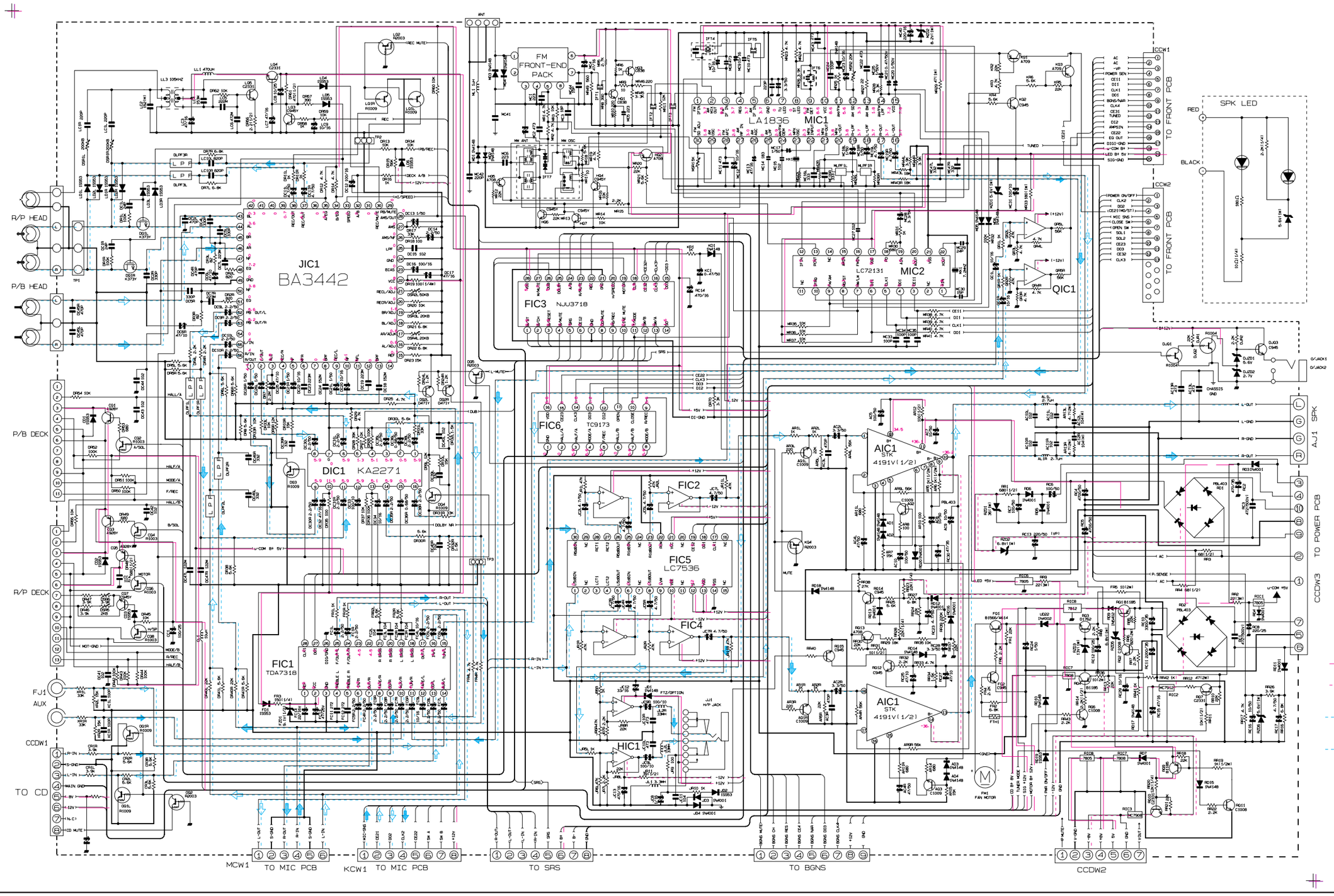
SIC3 (C0)

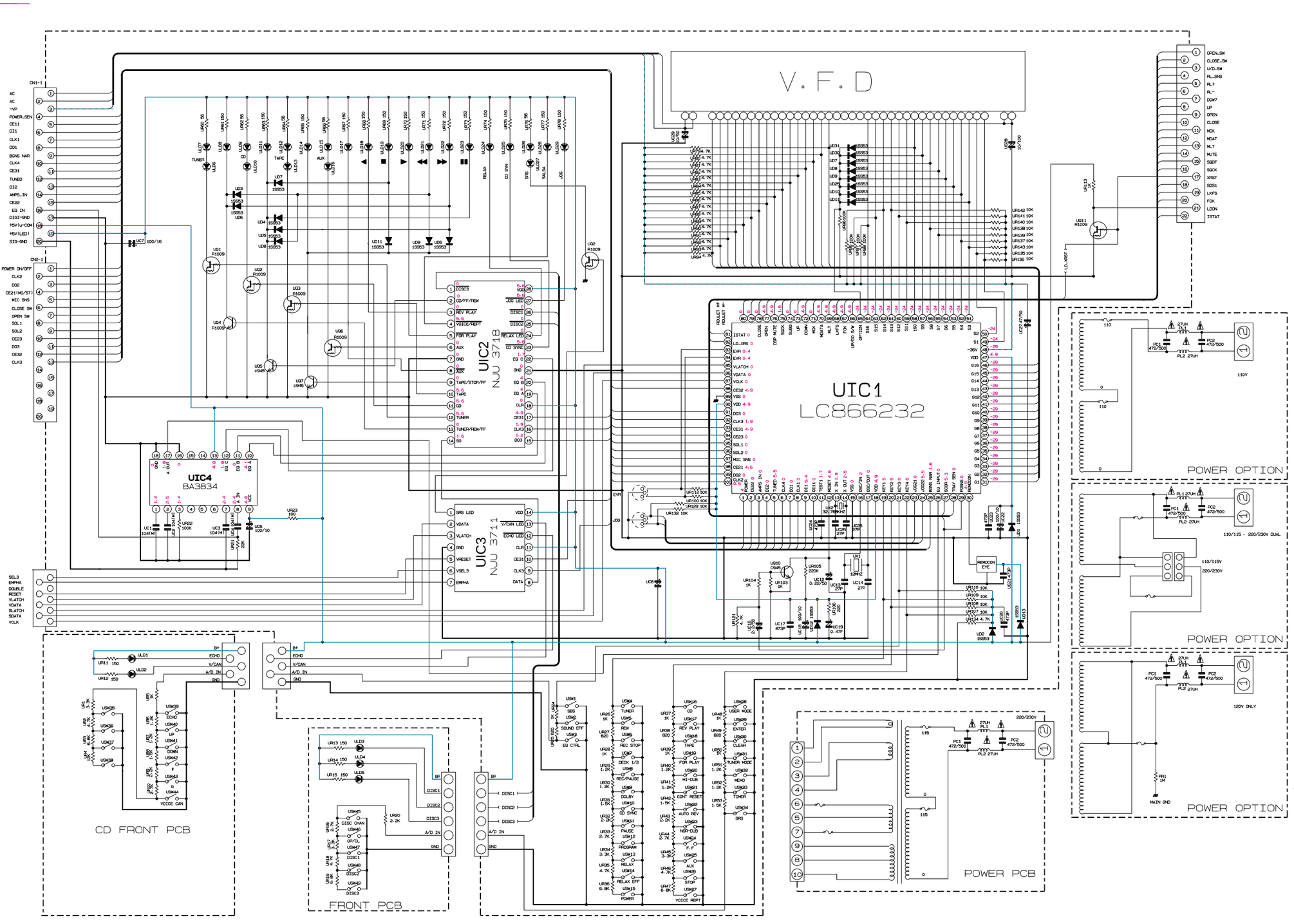
11. Wiring Diagram

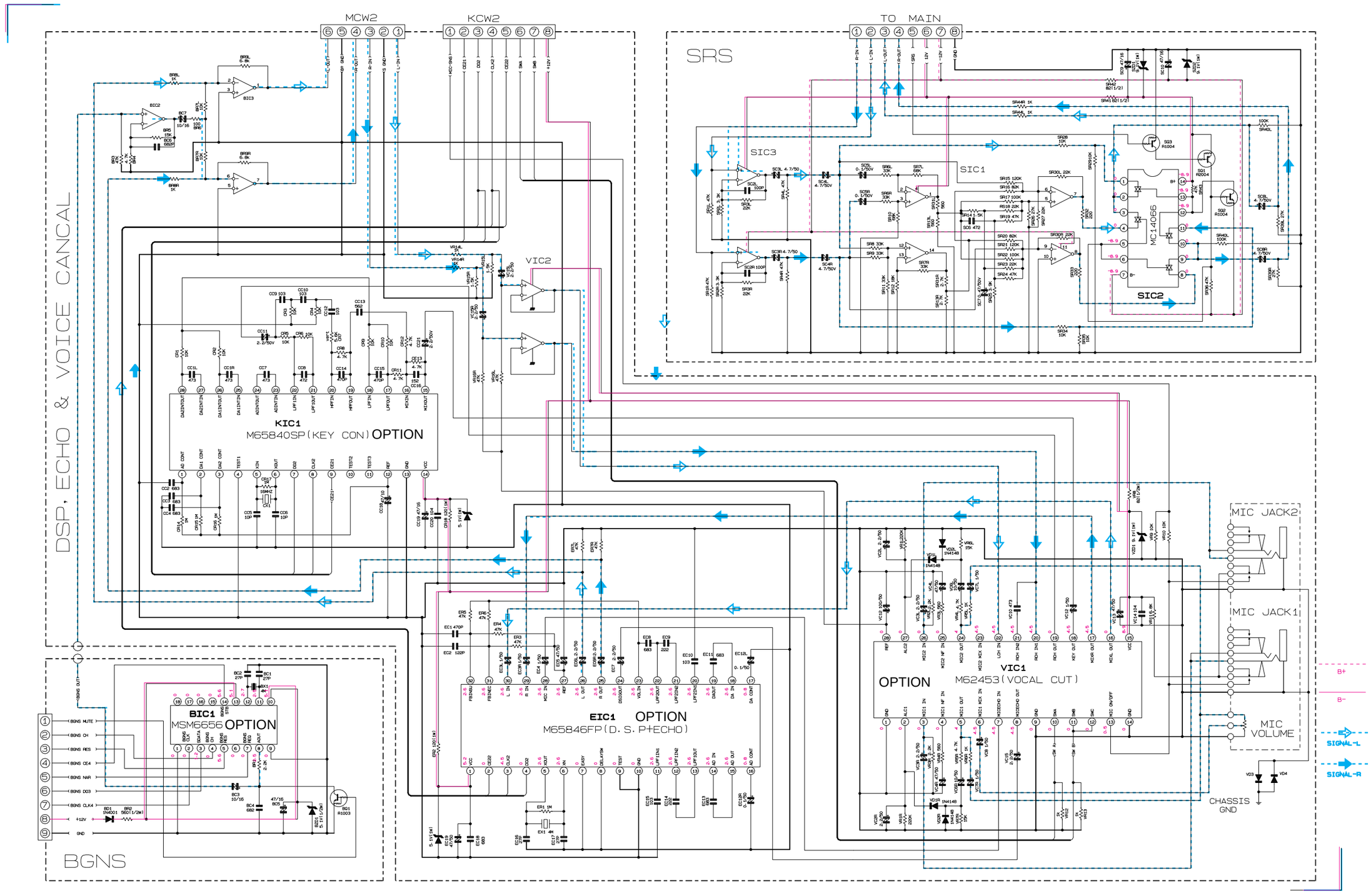


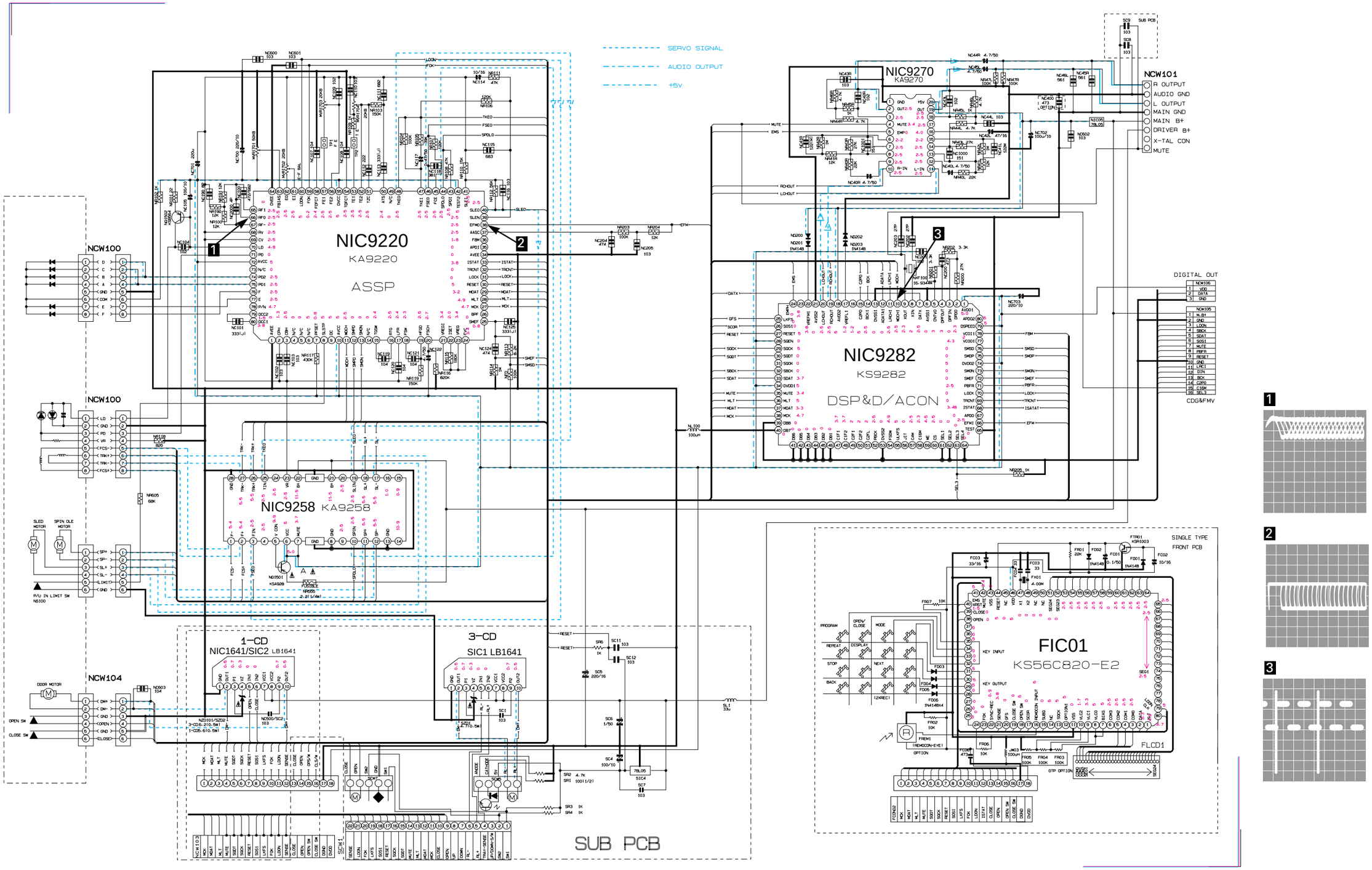
12. Schematic Diagrams

12-1 Main




V.F.D
UIC1
LC866232
UIC2
NJU 3718
UIC3
NJU 3711
UIC4
BA3834
CD FRONT PCB
FRONT PCB
POWER PCB
POWER OPTION
POWER OPTION
POWER OPTION
110/115 · 220/230V DUAL
110/115V
220/230V
120V ONLY
MAIN GND
REMOCON EYE
OPEN_SW
CLOSE_SW
LVDL_SW
RL_SNS
RL+
RL-
DOW7
UP
OPEN
CLOSE
MCK
MDAT
MLT
MUTE
SQDT
SQCK
XRST
SQSI
LKFS
FOK
LDON
ISTAT


DSP, ECHO & VOICE CANCAL
MCW2
KCW2
TO MAIN
SRS
SIC1
SIC2
SIC3
MC14066
KIC1
M65840SP(KEY CON) OPTION
BIC1
MSM6656 OPTION
EIC1 OPTION
M65846FP(D. S. P+ECHO)
VIC1
OPTION
M62453(VOCAL CUT)
BGNS
MIC JACK2
MIC JACK1
MIC VOLUME
CHASSIS GND
B+
B-
SIGNAL-L
SIGNAL-R


SERVO SIGNAL
AUDIO OUTPUT
+5V
NIC9220
KA9220
ASSP
NIC9270
KA9270
NIC9282
KS9282
DSP&D/ACON
NIC9258 KA9258
NCW100
NCW104
NCW101
R OUTPUT
AUDIO GND
L OUTPUT
MAIN GND
MAIN B+
DRIVER B+
X-TAL CON
MUTE
DIGITAL OUT
CDG&FMV
SUB PCB
1-CD
NIC1641/SIC2 LB1641
3-CD
SIC1 LB1641
FIC01
KS56C820-E2
SINGLE TYPE
FRONT PCB
FLCD1
DOOR MOTOR
OPEN SW
CLOSE SW
SLED MOTOR
SPIN OLE MOTOR
P/U IN LIMIT SW
NS100